

## St George's owners hold talks

ARBUTHNOT Properties, the new half owner of William Wilkins' St George's Hospital building at Hyde Park Corner, is to discuss plans for reusing the building with Grosvenor Estate, its benton rival bidder and now semi-detached neighbour.

Martin Myers, chief executive of Arbuthnot, pledged this week to restore the grade II listed building "to its former glory". Westminster planners are also determined to see it restored, as they can now take legal action to force repairs following the end of Crown immunity.

Grosvenor Estate said it did not rule out the possibility of a joint development. It owns the major part of the site, including existing access.

## DHSS review cuts architectural staff

ARCHITECTS' jobs in the health service have been lost as part of a review of Department of Health and Social Security functions.

A reorganised Health Building Directorate has been formed, with a staff 40 per cent smaller than the parts of the former Works Group it replaces.

Former DHSS chief architect Howard Goodman heads the directorate (under-secretary rank), which represents "a new philosophy in health building management", according to the DHSS. Its tasks will involve research and development of

maintenance, monitoring, new technology, and enhancing the environment inside and outside hospitals.

## Mail contest

A COMPETITION for the design of a shopping mall in Bournemouth has been launched by Bournemouth council and Grosvenor Developments.

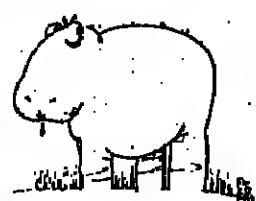
Practises invited to produce schemes are Michael Hopkins Associates, Reisch & Hall, WH Saunders, BDP, Fitzroy Robinson and Renton Howard Wood & Levin.

## Firm suggests drive-in cinemas for Docklands

PORTABLE drive-in cinemas have been suggested to the London Docklands Development Corporation as a way of using undeveloped land.

The company behind the scheme, Capital Leisure Corporation, says drive-in cinemas are "great for land not fully developed as they are unbeset, if necessary, overnight".

## ...signing off...



## Docks grant

TERRY Farrell's conversion for an 18th century tobacco warehouse in London's Docklands is to go ahead with the backing of a £2 million urban development grant. The £20 million project will include 12,600sq m of shopping, restaurants, bars and sports facilities. Work will start on site in June.

# RICS launches campaign to fight off competitors

By Lewis Blackwell

(including the new Lloyd's building and Hongkong Bank), and explains how chartered surveyors are the key to doing a good job.

It claims: "Chartered surveyors, above all other professions, are trained to value, develop, cost, conserve, design, adapt and manage the way we use natural resources and the

built environment... chartered surveyors have more influence than any other single profession over the appearance, quality and prosperity of the developing environment."

The institution hopes to influence potential clients into seeing surveyors as the natural project leaders.

Neville Eldridge of the brochure designers, consultants Boyd Eldridge, said: "This has to be the way for the professions to develop. I would dearly love to get my hands on the RIBA, although I don't suppose the RICS would allow me."

And the institution's council this week also proposed to change its rules on limited liability, to allow members to bring in outside capital, such as break-away surveyors have done by going on the unlisted securities market. An extraordinary general meeting of the RICS will decide on July 14.

## Giant shopping scheme

Plans by Chapman Taylor for a million shopping and leisure centre on the River Don on the site of Sheffield are about to go to planning permission.

The proposed development, as the Meadowhall Centre, is a 40ha derelict site on the edge of Sheffield. It includes a two-level shopping centre, a leisure centre complete with pool, ice skating track, roller rink, a 10-screen cinema and a 10-screen cinema.

Developer Paul Styles (see page 10) said: "The architecture will be a mix of modern and traditional styles. The project could draw up to 45 million a year, with potential customer catchment of almost 5 million."

## Liverpool housing about-turn

LIVERPOOL city council is turning to the private sector for the £500 million it needs to regenerate its housing stock.

Councillors this week revealed plans to sell off land and run-down estates for which the council has refused to build.

City architect Jim Robb commented that although the city had emphasised public sector housing in the past, the search for private investment was "not out of line" with the main public house building policy.

One property on offer is the low-rise Radcliffe Street estate designed in the 1960s by Bradshaw Rowse & Harker and the city architects.

The council said the estate was now "socially unacceptable" to its tenants.

## USM move on the way

COVELL Matthews Wheatley Partnership has become a limited liability company and changed its name to Covell Matthews Wheatley Architects, paving the way for a flotation on the Unlisted Securities Market.

This move follows hot on the heels of D Y Davies' recent successful flotation on the USM three weeks ago. Shares in D Y Davies have shot up by 31 per cent in two weeks.

John Wheatley said his company had "an encouraging amount of work on", and that a flotation was likely early next year. He estimated around a dozen other architects were also lining up to join the USM.

No 786 The weekly new

the design team

FRIDAY MAY 9 1986

Not quite £500 million (see story below) but even a mere £250 million is set to give Yorkshire something it has not seen before in the shape of the John Brunton-designed retail park at Stanningley, outside Leeds.

The development, by the Mountleigh Group, is in far outland planning, and has the backing of major retailers such as Asda and Marks & Spencer. It would create 1,500 jobs.

Besides shops, it will include a multiplex cinema, sports village, bus station and 3,000-space car park.

Mark & Spencer

## Midlands council backs £500 million mixed development

# ARCHITECT PLANS RETAIL COLOSSUS

PLANS for the biggest shopping and leisure complex in the world are being drawn up by an architect-developer for a derelict Black Country steelworks site.

Behind the scheme is AA-trained Igor Kolodotschko, head of the Stratford-upon-Avon based Color Properties. He has appointed Percy Thomas Partnership to design the £500 million development.

The team last week won the crucial backing of Sandwell council, which owns the 40ha steelworks site in Wednesbury. Kolodotschko now has a six-month option on the site, but expects to gain final approval for the project well before that

deadline. Sandwell council will be joint developer. "I know it sounds big," said Kolodotschko, "but I can assure you this project is fully commercially viable. It will be half leisure, and half shopping, that's what makes it work."

He has based the proposal on the Edmonton Mall development in Canada, by far the

world's biggest such centre. Before last week's council meeting he and FTP partner John Verette took leading councillors and officials to see the Edmonton scheme and hear how it had solved the city's unemployment problems at a stroke.

Kolodotschko said his development would become an international tourist attraction, as well as a shopping draw for the area bounded by Bristol, Manchester, Shrewsbury and Coventry. It would begin by providing 25,000 jobs, with further employment in service industries. More than 60,000 people would be in the complex at one time.

Masterplanning and design is now underway. The scheme will include a massive water park, set under a dome with an "artificial sun" rising and setting.

There will be a Disney-style fun park, a zoo, a 24-screen multiplex cinema, more than 60 restaurants and 800 shops. In all, amounting to more than 450,000sq m of development.

Talks are going on with the DoE on the scheme's implications, as well as in the hope of obtaining grants towards infrastructure improvements. The developer also claims the back-

## East End tower giant postponed

THE application to build what would be the tallest building in Europe, in Whitechapel, has been postponed.

Textile merchant and developer Roy Sandhu has said he wants to rework the Ian Ritchie-designed 60-storey office tower to the new Tower Hamlets council, following local authority elections.

The council's director of development has a report waiting from members which recommends refusal of the scheme as being an over-development contrary to council policies.

And the Royal Fine Art Commission weighed in with its opinion this week. Chairman Norman St John Stevas said the commission had "deep concern about the size of the building, especially the shadows it would cast and the down-draught it would create". It called for Tower Hamlets to prepare a planning framework to consider the implications in detail.

## Spitfields market study

DEVELOPMENT consultants Bernard Williams Associates are to carry out a study of the future of Spitalfields Market for Tower Hamlets council.

Their work will form the basis for public consultation beginning next month. This follows the council's expectation of development proposals being submitted following the local elections, which will include London & Edinburgh Trust's

## London watchdog launch

A POTENTIALLY powerful new committee formed to advise on sensitive London planning applications met for the first time this week amid growing pressure for changes to big developments in the capital.

The London Advisory Committee, including architects Terry Farrell, Ted Hollamby, and Bridget Cherry, will discuss projects that have become subjects of heated public debate.

The committee, formed in the wake of the Greater London Council, is part of English Heritage, the state-backed conservation organisation which

now incorporates the old GLC historic buildings division.

The committee will be advising English Heritage on London matters. They in turn are advised by the London Division of English Heritage, headed by Ashley Barker.

Hollamby told *BD* that the committee's potential "is very considerable because it is part of a national body and one step closer to the government".

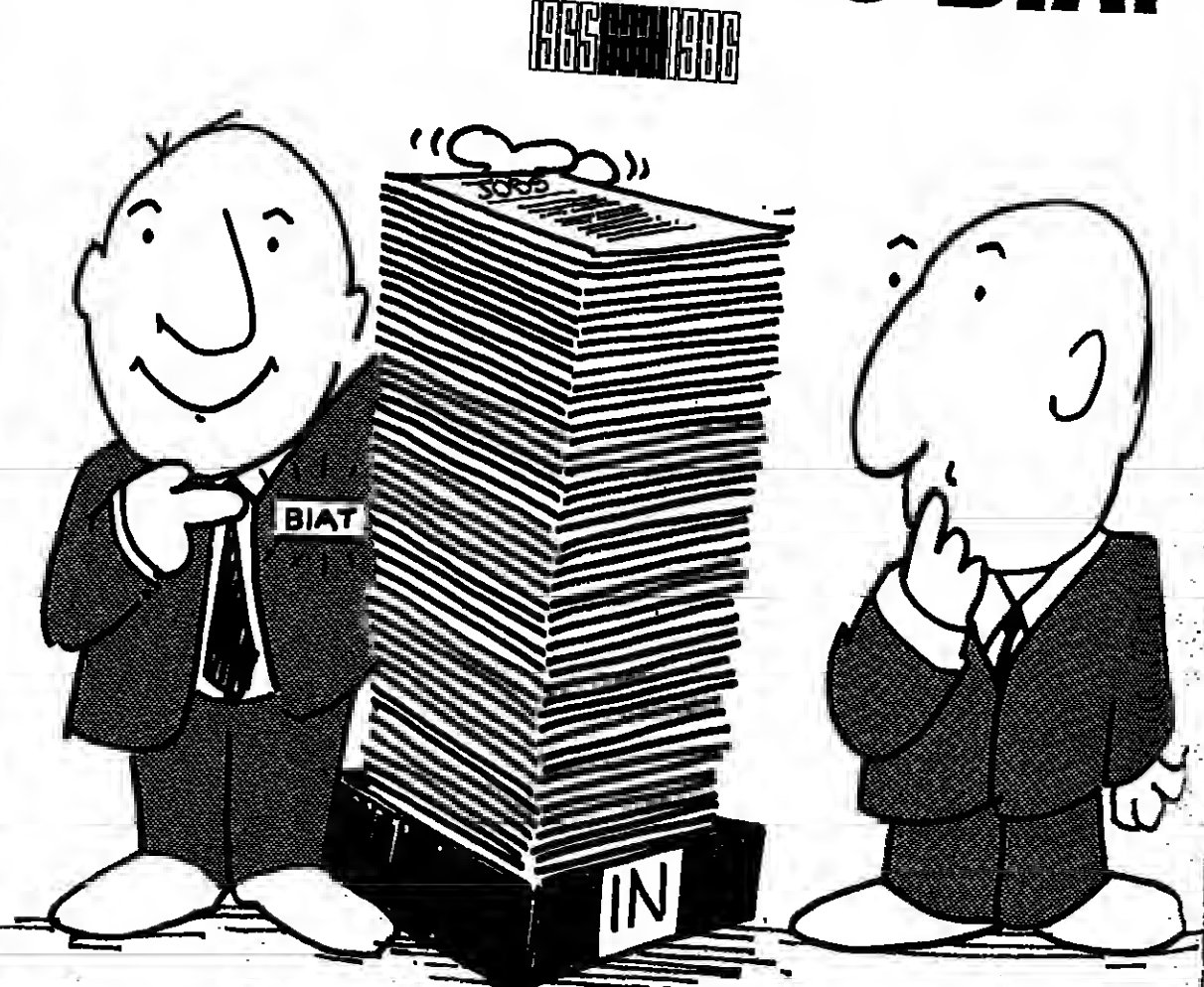
Two London developments causing most concern to conservationists are the proposed scheme for the Royal Mint building on the edge of the Docklands by RMJM, and the

conversion of St John's Lodge in Regent's Park to an art gallery by American architect Charles Young and English associate Michael Manser.

Plans for the Royal Mint, known as the Johnson-Smirke building, have been criticised by conservation groups who say that the planned refurbishment will destroy the building's architectural and historical qualities.

The London Advisory Committee, while generally in agreement with RMJM's scheme, will have an active role in any future discussions over the Mint. continued page 3

# 21 YEARS OF PROGRESS FROM SAAT TO BIAT



1986 sees a double celebration for the SOCIETY OF ARCHITECTURAL & ASSOCIATED TECHNICIANS: the 21st birthday of its creation, and on the 1st of May, a change of name to the BRITISH INSTITUTE OF ARCHITECTURAL TECHNICIANS.

For 21 years SAAT has consistently improved the Education and Training Programme for Technicians in Architecture, and is now recognised as THE Qualifying Body in this sphere. BIAT will accelerate this evolution process.

The year of our majority is the beginning of a new era for architectural technology, therefore, we

hope all our members, old and new, will join us in our birthday and inaugural celebrations. Full details of forthcoming events can be obtained from BIAT's Central Office.

If you are NOT a member of SAAT, yet plan for technical success in Architecture, aim to become a member of BIAT: membership will give you status and worldwide recognition.

CONTACT THE REGISTRAR, BIAT, Central Office, 397, City Rd, London EC1Y 1JN. Tel: 01 716 2100

BIAT

FROM THE 1<sup>ST</sup> MAY 1986 THE TECHNICIAN WITH AMBITION BELONGS TO BIAT



**POROUS** — surface water drains freely, so ideal for walking areas and equally for landscaping — gives plants a chance! No need for support rings.

**NON-SLIP** — safe in shopping precincts and walkways — anywhere where traffic is heavy, indoors or out, wet or dry.

**FROST-PROOF** — resists heat also and inhibits algae growth. A protective barrier to asphalt and tarmac against ultra-violet rays.

**DECORATIVE** — distinctive top surface imparts interesting appearance. Five standard colours (grey, red, buff, terracotta and ivory; others to special order). Consistent throughout tile's lifetime.

**DURABLE** — have proved effective in protecting asphalt and tarmac roots against pedestrian traffic. Equally long-lasting in terraces, precincts, promades, car parks, etc.

**ECONOMICAL** — much cheaper to buy and install than asphalt or cement or glass-reinforced tile — lasts longer too.

JAS STRUTTON & SON LTD  
SLOUGH LANE, ARLEIGH,  
NR. COLCHESTER, ESSEX CO7 7RU  
TELEPHONE: (0206) 240553



AS the designer of the renowned Children's Home in Amsterdam and the most influential teacher to have emerged from Team X, the choice of Aldo van Eyck to be the first architect invited to speak at Clare Hall Cambridge's Tanner lectures on "Human Values" was natural.

During the day-long seminar which followed the lectures and was chaired by Joseph Rykwert, Colin St John Wilson described van Eyck as a "philosopher-architect" who uses reflection as a means to the making of buildings. This was in response to debate arising in the seminar as to whether architecture conformed to an artistic metaphor or a scientific one. Certainly van Eyck had made plenty of references to both practices in his lectures, and indeed their title, "The Medicine of Reciprocity", in part referred to this hoary problem about architecture's nature.

Van Eyck's desire to ground design in human nature has informed his work since the Tami X Otterlo conference in 1959, and throughout his lectures he returned to the themes and motifs now familiar to his architectural followers but still new to his academic audience. These included the value of anthropology and learning from "primitive" cultures; the reconciliation of opposing necessities; the need to confront and deal with the existential uncertainty consequent upon the discoveries of modern physics that have brought man for the first time to a primordial encounter with his own nature; and the need to understand that nature as a replacement for the fixed and hierarchical cosmic mythologies that guaranteed archi-



Aldo van Eyck: "A great idea, half told, and barely understood."

tectural order in former times: "whatever Space and Time mean, Place and Occasion mean more."

Once again we were shown Van Eyck's germinant emblem of twin circles that he designed for Otterlo in which three paradigms — the classical temple ("immortality at rest"), an orthogonal projection of an elemental structure by the De Stijl Van Doesburg ("modernist continuity"), and a plan of a Pueblo communal dwelling ("behavioural, vernacular form") — were represented as the thematic material for a modern architecture of humane reconciliation.

Many of these themes had been developed by van Eyck in the 50s and 60s during his critique of reductive modernism, and especially CIAM: "CIAM became a shell with no interior, and therefore without the sound of the sea."

However, even before he had come to this point in his lecture it had become evident to architects in the audience that van Eyck was using them now in another polemic, this time against so-called "post-modernists" and the new meta-physical rationalists. Van Eyck

refrained from naming names, but among those illustrated were Graves, Boffill, Ungers and Leon Krier. Contrasting their work with the intimacy, depth and subtlety in examples from Palladio and Corbuse, he accused these "rats, posers (rationalists, post-modernists) and other pests" of wilful inhumanity and a craven regression to discredited idealisms and repressive formal orders that could be justified by no authority other than those of a self-indulgent conception of the artist and the money power of commissioners' megalomania. Pointing contemptuously to Graves' Humana Building, van Eyck said: "Memory is time humanised. But this can't be brought about by arbitrary references and cross-references."

The complicating factor in van Eyck's polemic now became his return to the values of a true modernism that he felt had been forgotten, the moderns of both science and art: Einstein, Bohr, Heisenberg and De Broglie for their establishment of relativity and indeterminacy in modern cosmology, as well as the adventures in form initiated by Picasso, Klee, Joyce, and Strav-

## The flying Dutchman

Aldo van Eyck was the first architect to give the Tanner lectures at Cambridge. Brian Hetton reports.

insky. Only "the architectural Modern Movement soon side-stepped the issues that constituted the essence of the avant garde". This was the story of "a great idea, half-told and barely understood, wasted: this century's modern movement in art, science, and thought. But when the current 'interruption' is over and history is no longer squandered, human matters will count once more; beyond the mock complexity of feigned contradictions the real job will continue."

This wasn't so easily followed. Physicists and anthropologists in the audience hauled at what they felt was an unwarrantable misuse of their specialisms, but even for some architects there was surprise. Had not the ideas of van Eyck and Joseph Rykwert been precisely among those most quoted by many of the new priests of ritual and meaning in architecture? Is not Graves forever mauling portentously about "threshold", even if it simply turns out to mean for him a place where much expensive marble and elephantine gesturing is to be found?

Moreover, sympathy with Van Eyck's exposition was tested by his digressive, even self-indulgent, style of presentation, which took hours to reach its point. One felt that insofar as the "philosopher-architect" exists,

then his philosophy must surely inhere in his buildings and designs rather than in his polemics, and only at the end of the second lecture did we get to see some pictures of these.

This was preceded by an extended illustration of his themes by slides of primitive artefacts in van Eyck's own collection. One could readily appreciate the inspirational value of these actually highly sophisticated designs, while doubting the rigour and justifiability of his method of reading them without full reference to their original significance. Can van Eyck's personally vivid apprehension of these artefacts constitute anything but a purely personal, and therefore enigmatic, method for learning and design? At times the argument seemed over-simple and when, during the subsequent seminar, van Eyck claimed that making good buildings was in no way different from good haking, Rykwert, or historian that he is, was moved to declare: "I think that is disingenuous."

The question of method dominated the seminar, with Amos Rappaport opening with a call for a new disciplinary base to architecture founded upon evaluative technique, a view supported to some extent by the following speaker, the social psychologist Irving Altman. These views were attacked

during open discussion, countered that architecture he criticised but it was object of evaluation. Another point made: exponents of postmodernism always fall back, when on the roots of criticism, on the roots of criticism. Rappaport had just said: "I had not the value of divinatory methods of design to cosmic myth, articulation of concepts, solipsism and individual 'intuition'."

The two final slides brought the debate back to van Eyck's ground. St John Wilson emphasised there is something in architecture, and that architecture is not the solution problems but the language of situations.

Finally, Francesco R. the most reconciling of the talks, returned to the closed by anthropological sacrifice and gift, metaphor substitution embodied in the separation that is made myth, which even in its parent absence still lives. Background to modernity.

To this modernity, uncontainment or uncontainment, architecture must build the contemporary home. "Van Eyck is one of the very few artists of the 20th century who continues the most ancient sense of the discourse, (the only voice of the West), the keenest sense of the human condition, the most sensitive, and without the necessity of which it is impossible to build a house, because the whole world is destined to become 'Wansford' as the Western world certainly not survive without becoming 'Thick'."

## Williams in focus

Dennis Sharp reviews the AA's exhibition on Sir Owen Williams.

THE crowded opening of the AA's Sir Owen Williams exhibition was a nostalgic affair. Smartly dressed engineers and their ladies mingled with the usual Bedford Square season ticket holders. Nostalgia also spilled out of the lengthy introductions by those who revere Williams as the British "genius" of the inter-war period.

Lord McAlpine, who opened the proceedings, brought Williams swiftly into focus. He was not just an engineer, he said, but a man of ideas, a genius who was knighted for his brilliant work at Wembley at the early age of 34 and "one who thought a long way ahead of his generation of engineers". Williams was "compelled to play the role of architect" because — Lord McAlpine said — the architects of his day could not do what he wanted.

In 1929, in an effort to cross the barrier between engineering and architecture, Williams persuaded his architect friend Oliver Bernard to second him a bright young assistant. That young assistant he "borrowed" was J M (now Sir James) Richards, who began his own speech by referring to Williams' tremendous enthusiasm for the Dorchester Hotel project. It would appear that Williams and Richards did not get on so well in the office. But Stephen Rosenbarg clearly did and he was able to call the audience's attention to Williams' expansive nature and to the current two by Owen Tudor Williams.

The exhibition itself is disappointingly slight. This is by no means the fault of the designers, Ron Herron and Jan Kaplicky,

who have valiantly made a meal out of a morsel. It is due to the unfortunate destruction of original material over many years. I suppose it is difficult to know whether you are sitting on a goldmine of historically significant nuggets or a pile of useless drawings and papers, but the lack of original material is now made plain.

The exhibition's central feature is a pair of smartly constructed frames supporting photo blow-ups which will show a new generation how good Williams was.

The exhibition thankfully is supported by an extremely well documented and nicely produced catalogue giving the first full catalogue raisonné of Williams' work. This hefty tome was made possible by fundamental research carried out by a young Sheffield-based architect, David Cottam, whose work on Williams formed part of a PhD thesis on inter-war functionalism.

Cottam's interest in Williams began when he was a Liverpool University school student preparing a thesis on the Dorchester Hotel. This is fundamentally reappraised in the catalogue and brings to light a much greater involvement by Williams' than has been previously acknowledged. Cottam revisited an ill-fated and highly readable commentary on each. Included in the original works in the exhibition are three sketches of a remarkable concrete and steel project for Waterloo Bridge (1932) and a perspective of Wansford Bridge, Cambridgeshire, designed with Maxwell Aytoun.

"Sir Owen Williams (1896-1986) is on show at the Architectural Association, 36 Bedford Square, until May 24."

## Poor store designs attacked

FIRE risk from poor shopping centre and store design was attacked by the Consumers' Association this week.

A survey in *Which?* magazine found "serious and worrying problems" at several stores, with inadequate stair enclosure details as the main design feature blamed.

Of 22 stores investigated, two were found to have "fairly poor" conditions, and one — the new closed Woolworth in New Street, Birmingham — was "poor", with no compartmentation between floors and hazardous escape routes.

*Which?* concluded that there is "no room for complacency". Although concern was shown and money was being spent on fire safety, "there may be an information gap in basic fire safety principles, particularly on the part of some stores and the fire safety advice they are receiving."

## Rolland wins competition

RIBA president Larry Rolland's practice, L A Rolland & Partners, have won a limited competition to design timeshare units at Taymouth Castle, Loch Tay.

The result was to be announced at the RIAS convention today.

Other practices invited to enter were MWT Architects and Law & Dunbar-Nasmith Partnership.

## Furniture show

NINE young furniture designers are featured in the "London furniture designers" exhibition opening today at the 9H Gallery, 26-28 Cramer Street, London W1. The show runs until May 30. Details: 01-486 3555.

## Planners oppose bus station report

WESTMINSTER planners could upset moves to build a £50 million coach station in London by going against the findings of a major report commissioned by the Department of Transport.

The planning authority has come out in favour of building several small coach stations in and around London to supplement the over-used Victoria station.

Transport planning consultants Steer, Davies & Gleave, who compiled the report, concluded the capital would be best served by one new central station.

But Alan Bradley, chairman of Westminster's planning and development committee, said: "There is little or no evidence given in the report to justify that London needs a single 'hub' coach terminal."

It would seem that the 'hub' concept is one largely aimed to satisfy operators' needs and takes little account of the effects on the local community.

He said small stations would diffuse the problem and could ensure fewer coaches travelled through central London.

The report, which used Campbell Zogolovich Wilkison & Gough as architectural consultants, identified three sites. They were the Kings Cross freightliner terminal, site, the Uxbridge Road depot at White,

## Stamford Bridge plan scores with Chelsea residents

HAMMERSMITH council has given detailed planning permission for the development of Chelsea Football Club's Stamford Bridge ground.

In the run-up to the local elections, Hammersmith's Tory-led council pushed through plans for a private luxury housing development at last week's planning committee.

The scheme had already won outline planning permission last year, despite the club's massive petition to save the ground. Local residents are known to be in favour of closing the ground, and during the public consultation supported the redevelopment plans.

The owners of the site say they plan to close the ground in 18 months, when the club's lease expires.

The scheme is being drawn up by Shaw Associates, a firm of chartered surveyors and architectural consultants. A total of 99 terraced houses and 120 flats are planned for the 4.2ha site, with parking for 256 cars. There will be a central landscaped area with four tennis courts and a pavilion, as well as 1,500sq m of offices.

The threat to Chelsea's ground is the latest in a long line of cases where major sporting facilities, for a variety of reasons, have been closed or are under threat.

Chelsea's near neighbour, Fulham, has also experienced developer interest in its Craven Cottage headquarters, and many supporters believe the

present owners would be more than happy to vacate the traditional home.

Charlton Athletic, after a long-running financial crisis, has left its huge ground, The Valley, to the disgust of loyal fans.

There have also been rumours about another south-east London stadium, at Millwall. The club has been fighting for years to redevelop its ground, incorporating new seating and stands.

The plans have been opposed by the local council and the Greater London Council. Greyhound fans have not fared much better, with the closure of the White City Stadium.

Even the Kennington Oval cricket ground has not been exempt from development interest — only public reaction prevented an office development which would have cut the size of the ground by a third, and probably led to Surrey quitting for an alternative ground in the country.

By Amanda Ballieu

by the local council and the Greater London Council.

Greyhound fans have not fared much better, with the closure of the White City Stadium.

The stadium at Haringey has also been turnover over for development purposes.

Even the Kennington Oval cricket ground has not been exempt from development interest — only public reaction prevented an office development which would have cut the size of the ground by a third, and probably led to Surrey quitting for an alternative ground in the country.

By Amanda Ballieu

by the local council and the Greater London Council.

Greyhound fans have not fared much better, with the closure of the White City Stadium.

The stadium at Haringey has also been turnover over for development purposes.

Even the Kennington Oval cricket ground has not been exempt from development interest — only public reaction prevented an office development which would have cut the size of the ground by a third, and probably led to Surrey quitting for an alternative ground in the country.

By Amanda Ballieu

by the local council and the Greater London Council.

Greyhound fans have not fared much better, with the closure of the White City Stadium.

The stadium at Haringey has also been turnover over for development purposes.

Even the Kennington Oval cricket ground has not been exempt from development interest — only public reaction prevented an office development which would have cut the size of the ground by a third, and probably led to Surrey quitting for an alternative ground in the country.

By Amanda Ballieu

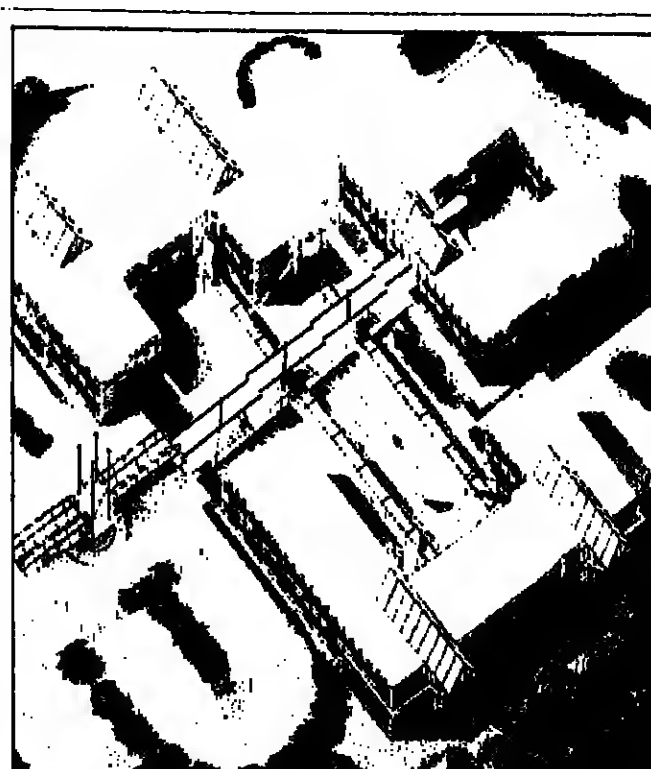
by the local council and the Greater London Council.

Greyhound fans have not fared much better, with the closure of the White City Stadium.

The stadium at Haringey has also been turnover over for development purposes.

Even the Kennington Oval cricket ground has not been exempt from development interest — only public reaction prevented an office development which would have cut the size of the ground by a third, and probably led to Surrey quitting for an alternative ground in the country.

By Amanda Ballieu



An office "campus" has been designed by Covill Matthews Wheatley for a 2.4m site at Weston Down, Swindon. The £4.5 million scheme for Wyndham Investments is on site and due for completion in September. It will provide 7,800sq m of space in three two-storey buildings, linked by covered walkways with a feature tower at the main entry point. Silvered aluminium cladding and grey-tinted glass will contrast with red painted structure and window bars.

## SALVIACIM. THE TOUGH SURFACE FOR THE TOUGHEST JOB.

IDEAL FOR: WAREHOUSE FLOORS · VEHICLE PARKS · BUS LANES · LOADING BAYS · FARM ROADS · STORAGE AREAS · MAINTENANCE WORKSHOPS · CARGO DEPOTS · FACTORIES

SALVIACIM is a semi-rigid surfacing process that combines the flexibility of macadam with the toughness of concrete.

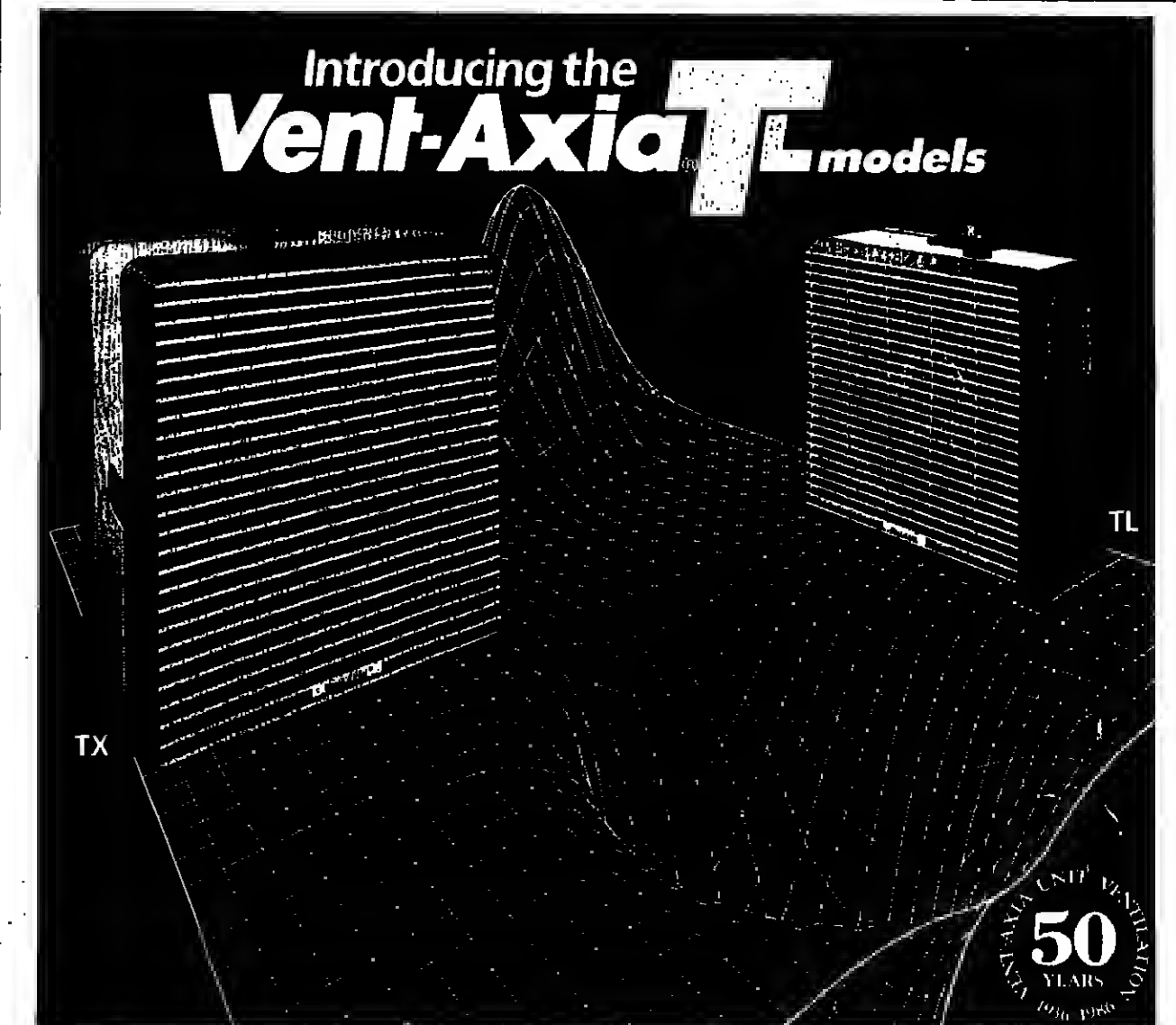
Its resistance to abrasion and rutting, fuel spillage, organic chemicals, short-term high temperatures, dusting, combined with its load spreading capacity and ability to accommodate minor settlement over a sound flexible base, makes SALVIACIM the ideal cost effective surfacing solution for many road, industrial and off-highway situations.

A COMPOSITE 4 CM THICK LAYER OF GRADED BITUMINOUS AGGREGATE PENETRATED WITH A RESIN BONDED CEMENTITIOUS GROUT. Laid upon new or existing sound support courses. SALVIACIM NEEDS NO EXPANSION JOINTS AND WILL ACCEPT PEDESTRIAN TRAFFIC WITHIN 12 HOURS AND GOODS VEHICLES AFTER 7 DAYS.

For further information please contact: James Kirkwood Marketing Department Tarmac Roadstone Holdings Limited PO Box 44 Wetherhampton W1 4RU Telephone: 0802-22411

**SALVIACIM**  
TOUGH SURFACES  
RBA CERTIFICATE NO. 8411367

**Tarmac Quarry Products**



## We've doubled your choice and helped cut the cost of fresh air.

We've been changing ventilation into air ecology with the new Vent-Axia T-Series.

The further addition of the TL-shutterless model—doubles the range to 32 different versions. It's particularly ideal for use with ducting, in room-to-room systems and the ventilation of specialised equipment.

In situations like these, the shutterless Vent-Axia TL is the clear choice for value.

Like other T-Series models

this designer styled unit is tough and highly reliable. And it offers fully automatic control using sensor switches. Reversible air flow. And a unique speed control pack which allows High, Medium or Low to be preset at installation or a later date.

There are window, wall, panel and roof versions each in 4 sizes. Discover more about TL and the complete T-Series range by returning the coupon. At the double.

Fill me all—send me information on the Vent-Axia T-Series including the new TL models.

NAME: \_\_\_\_\_  
COMPANY: \_\_\_\_\_  
ADDRESS: \_\_\_\_\_

POSTCODE: \_\_\_\_\_  
Post to: Vent-Axia Limited, Flemington Way, Crawley, West Sussex RH10 2NN. Or phone: 0293 26002.

**Vent-Axia**  
Anything less is a false economy  
(Vent-Axia Ltd. A Member of the APV Group Ltd.)

12 NATIONWIDE VENT-AXIA SALES, SERVICE AND DISTRIBUTION CENTRES. SEE YOUR YELLOW PAGES.



## News

# Module 2 issue two libel writs over tv documentary

MODULE 2 have slapped two libel writs on Television South-West following the broadcast last week of a programme that examined the record of the Bridgend-based architects and project managers.

Independent Broadcasting Authority for permitting the showing.

The programme, "In for a penny", was twice delayed from being broadcast and changes

By Lewis Blackwell

were made at the request of the IBA's legal advisers before it was finally shown.

This was after protests by Module 2, Plymouth City Council and Torbay Borough Council, which had objected to various parts of the programme, and despite continuing objections by Module 2 and Plymouth.

The practice's solicitor, Peter Davis, said Module 2 were still considering whether or not to take legal action against the

Plymouth council chief executive Andrew Friess-Watson said the city's leisure and resources sub-committee had viewed the programme, considered Module 2's comments and rejection of the allegations, and then unanimously backed their decision.

The scheme would now go on to tender, and Module 2 would be among those invited to submit. The plan was to have it built by spring 1989.

He said the council was examining its legal position, and considering taking action. "We are concerned about the programme. The council totally refuses any suggestion that it has dealt with this matter in secrecy or haste."

Despite problems on several leisure-related buildings that Module 2 have been involved with, the practice has continued to win major leisure projects.

Current work includes a scheme for Brent Walker, the developers fronted by the former boxer George Walker, on the Basilidon Astrodome and at Brighton marina.

## Pevsner's memorial library appeal launch

SIR Nikolaus Pevsner is to get a memorial library within the British Architectural Library.

An appeal has been launched to raise funds that will be used for buying architects' papers and books on British architecture in fields that were of particular interest to the historian, who died in August 1983. The special collection would be available for study.

A Pevsner Memorial Trust is also being set up to raise funds for architectural conservation.

Money raised will be used to help conserve works that Pevsner is known to have admired and that are now threatened.

The Buildings of England series will form a ready source for the information. This trust appeal will be launched in the summer.

The library fund is appealing for material as well as money. Patrons include Denis Lasdun, Richard Rogers and John Summerson.

Details from the librarian, RIBA, 01-580 5533.

## Barratt gets another bite in Portsmouth

BARRATT is again a front-runner in the controversial choice of a company to refurbish the defect-ridden Portadown Park estate in Portsmouth.

After an outcry in December when it decided to give part of the 523-home estate to Barratt in return for its refurbishment, the DoE called for a review of rival offers for the work.

After legal advice the council compiled and was due to vote on the choice at a meeting last Thursday.

Instead, it rejected bids by

Laing and Regalian, but decided to give further consideration to another offer from Laing and Barratt's updated scheme.

The two will now be invited to present their proposals to the council next month.

## New role

FORMER DoE chief architect Ben Turner is to be the new chairman of the Building Conservation Trust's technical committee.

**HOW DO I CHOOSE BETWEEN ANODISING AND PAINTING?**

Ask the Architectural Advisory Service Centre  
67-81 Gorst Road, Park Royal, London NW10 6LS  
Telephone: 01-885 0833

This authoritative source for information on aluminium and steel finishes.

## News

## Surreal purchase spurned by trustees

THE trustees of the National Heritage Memorial Fund have decided not to support a bid to buy Monkton House, the surreal home of Edward James.

English Heritage had agreed to find £750,000, but the Memorial Fund said that it was unable to give Monkton "high priority". The trust said that "although the building has great charm the trustees were not convinced that it gave good value for money". It said it would have to have found £1 million.

Snives said the loss of Monkton was "terribly sad, although it was obviously not everyone's taste."

Plans for the house are now uncertain. A mystery buyer has now withdrawn his bid. But the trustees of Monkton still say that they are looking for a private buyer. Some of the contents could stay with the house as part of a "package". The rest of the contents will be sold at auction in June.

## Airports' honours

LEEDS and Bradford airport's £2million extension has won top honours in two recent awards schemes.

Leeds City Council gave the terminal building extension this year's Good Design Award only weeks after the Institution of Civil Engineers gave the airport an award for excellence for work carried out on its main runway.

The three-storey terminal, designed by Leeds city architects with Norwest Holst Construction as main contractor, has a departure lounge with new check-in facilities, ticket desks and information desks.

## Major new scheme on Isle of Dogs

FOUR teams have been asked to submit designs for an 80,000sq m mixed development at North Quay on the Isle of Dogs, east London, next to Canary Wharf.

The teams are Roseknigh with the American practice Heery International, The Architects Workshop and Ove Arup; London & Edinburgh Trust with Richard Seifert, and two consortiums, Town & City with Bovis, who are drawing up their own plans, and the Galleria Development Co with Robert McAlpine using BDP.

The site was owned by the Port of London Authority. They have now set up a joint company with the London Docklands Development Corporation to act as freeholder for the site.

The final designs will be released in three months and the winner will be chosen by the

LDDC and the PoLA.

All four schemes are under closely guarded wraps, but the planning brief is for a commercial, retail, leisure and residential development.

Heery International describe their scheme as exciting. They say it will be based on a perimeter office with giant stepped terraces containing the leisure element dropping down to an atrium at the back.

## Light awards

SUBMISSIONS are invited for the International Association of Lighting Designers' 1986 awards scheme for architectural lighting design. Details from: Marion Greene, 18 East 16th Street, Suite 208, New York, NY 10003 USA.

**stannah**  
LIFTS  
the stairbeaters

Stannah stairlifts and home lifts solve stair problems for the old or disabled at the push of a button - even when they're confined to wheelchairs. Find out more by ringing (0264) 64311 or write - no stamp needed - to: Stannah Lifts National HQ, Dept. 0002, FREEPOST, Aulavey, SP10 5BR. (24 hrs)

## Award choice

This year's Tower Hamlets design awards have gone to Hunt Thompson Associates for their Cavendish Street housing scheme (right) and to Goddard Manton for an office development at 84 St Katharine's Way (left).

Florian Beigel's Half Moon Theatre redevelopment and Colquhoun & Miller's Whitechapel Art Gallery were high commended in the general category, while the South Quay housing development by Comprehensive Design Partnership and Waterman's Quay by Ronald Toome International were commended in the housing category.

## Bath Society head quits in Cavendish House row

AWARD-winning architect David Brain has been forced to resign as chairman of a Bath conservation group after a row over his plans for the Cavendish House site.

The Bath Society opposed his plans for the development although, he says, it was initially welcomed by many members.

He has now resigned as chairman of the society's environment committee and is "not

£150,000 worth of landscaping by WLM Landscape Consultants.

The first attack on the scheme came when the developers invited conservation groups' comment on the scheme, before applying for planning permission late last year.

The Royal Fine Art Commission slammed it, claiming it was a weak imitation of Georgian architecture and was far too extensive for the site.

But Brain accused the RFAC of grossly misrepresenting the design and said his comments showed a total ignorance of

Georgian architecture.

The scheme has even divided Bath planners, who were asked to produce an official planning brief after the planning application. Several attempts have been thrown out. Their latest draft may be passed by the council this week.

## Victory for Gillinson

LEEDS-based Gillinson Partnership have won the controversial competition to design new £8 million leisure complex for Bournemouth council.

Gillinson beat a strong field of leisure designers. Controversy surrounded the competition because the six runner-up practices would be receiving any fees for the work.

The RIBA advised against involvement.

## Housing figures up

PRIVATE house building is growing, says a report by the National House-Building Council. A total of 39,400 houses were built in the first quarter of this year, an increase of 4 per cent on last year's figures. Seven per cent of houses built in this quarter were timber-framed, compared with 22 per cent in 1983.

The Government has pitched four sites in and around London for a proposed European Community Trade Marks office.

If successful, the office would be the first permanent European Community Institute to be located in Britain.

The four sites listed are a new building at St Katharine's by the Tower, an office block in Cooksop Street by Trafalgar Square, and sites in Harrow and Croydon. The scheme in Harrow (pictured) is the only one that would be purpose-built as a package, offering a 96-bedroom hotel, a public library - with additional reference section for staff of the Trade Marks building - a conference and exhibition centre, and a three-storey office block.

The architects for the scheme are Leslie Sacks & Associates with the London Borough of Harrow. Jakobsen are landscape architects and Ove Arup structural engineers.

Harrow council and developer County & District Properties believe that their proposal will make a "much greater presence than an empty office block". When all four proposals are received, the Government will make a formal bid to the European Commission. The commission wants to finalise proposals for the office by early next year.

# WHAT MAKES KONE THE FASTEST RISING LIFT MANUFACTURER IN THE WORLD?

We at Kone have a reputation for giving every project we undertake our fullest commitment and support. Whether it be the most simple contract or the tallest of orders, new project or modernisation. Could this be the secret of our success?

Or perhaps it's our after-sales operation, with national teams of qualified engineers providing a repair and maintenance service which is second-to-none?

Of course there's no disputing that the Kone range of lifts not only covers every conceivable application but that it is both exceptionally well built and reliable.

All these factors have undoubtedly contributed towards making our rise to prominence as smooth, and as quiet, as our lifts themselves.

But what really sets us apart from other lift manufacturers is our world leadership in technical excellence.

As many of our clients have discovered, nobody can match Kone for product research and development. Our ability to analyse each project specifically, and recommend exactly the right kind of lift has enabled many a plan to get off the ground and prevented many a budget from going through the roof.

And that's what's taken us, so rapidly, to our position as the third largest lift manufacturer in the world.

So, if you're specifying a new lift, or refurbishing an old one, make sure you talk to Kone - because with us the sky's the limit. Or is it?

**KONE**  
PIONEERS IN LIFT TECHNOLOGY.

Kone Marryat Scott Limited, 1st-17th Wellington Road South, Hounslow, Middlesex TW4 3JN.  
Telephone: 01-570 7799 Telex: 24966

Enter 4 ON EXPRESS ENQUIRY CARD

Enter 5 ON EXPRESS ENQUIRY CARD

Enter 6 ON EXPRESS ENQUIRY CARD



## Gloucester Green set to go ahead

THE troubled Gloucester Green development in Oxford looks set to go ahead at last.

New developer London & Metropolitan had wanted to buy the freehold of 2,400sq in of offices in the project, while the council had only offered a 125-year lease.

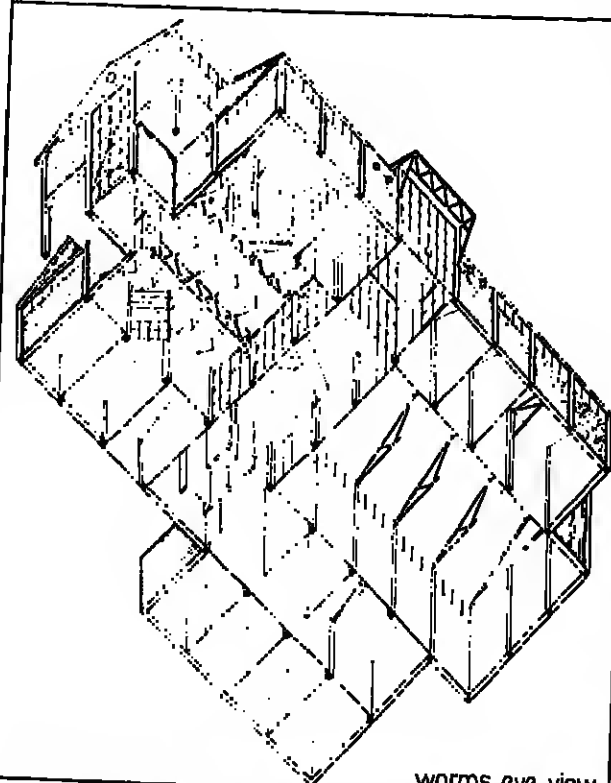
But now the developer will get the option on the freehold.

The scheme first ran into problems when the original developer, Dimsdale, was dismissed after its contract partner went out of business.

Then Dimsdale challenged architects Kendrick Associates' ownership of the plans. But the council is going ahead with the Kendrick design.

## Energy World

HUTCHINSON Locke & Monk's house for Energy World at Milton Keynes is for British Gas and not as stated last week.



WORMS eye view

Work is under way on a £1 million youth centre in Forest Gate, East London. Designed by Newham council's department of planning and architecture, it has a steel frame clad in silver profile sheeting to walls with yellow column casings, and slate-grey roof.

When completed in early 1987, facilities will include a multi-purpose sports hall, social area, group rooms and a gymnasium.

## Conservation groups warn of sell-offs in green belt

MAJOR conservation groups claim the DoE's proposals to relax restrictions on green belt developments could lead to a massive sell-off of farm buildings, threatening the rural architectural heritage.

Under the proposed changes, planning authorities could give permission for the conversion of redundant agricultural build-

ings into homes or small businesses.

Environment secretary Kenneth Baker advised planning authorities that any conversion must benefit the local community by encouraging new types of employment and enterprise.

But Philip Venning, secretary of the Society for the Protection of Rural Buildings, said the proposed changes were "very worrying".

He told *BD* the question of whether a farm building is redundant is difficult to decide.

"Obviously a farm building is more valuable developed. With pressure on the green belt for

By Amanda Bailille

new towns, farms will flood off existing farm buildings and put up cheap modern replacements," he said.

The society is carrying out its own national survey on farm buildings because they are one of the "main groups of historic buildings most at risk", said Venning.

The Council for the Protection of Rural England is also concerned that the new proposals could be "an excuse to break into the green belt".

CPRE spokesman Richard Bate said: "If Kenneth Baker is trying to promote employment in the green belt, converting barns into luxury housing is not the way to do it. This policy could boomerang unless there are restrictions on the way it is done."

But the Development Commission — a Government-aided rural development agency — has welcomed the changes.

## Leeds look into sick building syndrome

LEEDS council was considering a report on sick building syndrome.

This follows the environmental health department's growing number of complaints of illnesses connected to working in the city.

Tower blocks and other buildings have been the prime suspects, with complaints ranging through leg and skin and eye infections.



## Hard sell for concrete

Architects are one of the prime targets of a promotional campaign by the British Concrete Federation.

The federation, which represents 90 per cent of the precast concrete and will be launching a series of seminars, said the campaign was a response to the fact that many architects are unaware of the benefits of precast concrete.

## Index out

A 1986 index is now available for all current Building Regulations. The price is £5 from the Building Regulations Unit, Watford WD2 7JR.

## Masons meet

THE first general meeting of the newly formed British Masons' Society will be held on June 12.

## Survey of listings steps up its pace

UP to one in 50 buildings in England and Wales will be listed by the end of 1987 when the accelerated national survey of listed buildings is completed.

According to the select committee on the environment, which met with the DoE last week, the new survey will bring the total number of listed buildings from just over 3,000 up to 450,000.

This will comprise about 9,000 Grade I buildings of exceptional interest, 18,000 Grade II starred buildings of more than special interest and 423,000 buildings of special interest "which warrant every effort being made to preserve them".

Nevertheless, 2,150 listed buildings were partially demolished and 217 totally demolished last year.

Architect MP Sydney Chapman asked if he could expect to see these numbers rise in proportion to the increased number of listings.

Senior DoE official Hornsby reassured Chapman that the Government did expect to see that sort of thing. He said the department was looking to preserve "as much more" of the country's heritage and would be looking "very carefully" at any listed buildings to ensure its future existence.

Tim Hornsby told the committee that the Central Electricity Generating Board was asked to pay compensation for buildings damaged by a gas leak. The claim will depend on the findings of investigations carried out by the DoE.

## Pay-outs drop

Fire damage cost £10.5 million in the first three months of the year, down from £11.9 million in the same period last year, according to the Association of British Insurers.

## Foster's hit planning problems

FOSTER Associates have run into problems over plans for their new office and residential development at Ransome's Dock, on the south bank of the Thames by Albert Bridge.

Opposition from residents to Foster's scheme and a neighbouring development proposal led to Wandsworth council delaying planning permission and taking in more public comment.

Foster partner Gordon Graham commented: "I think we have been caught in the flak for the other development." That is by O & H Construction and proposes 71 flats, whereas Foster Associates want to build 21 flats in a river facing block, with offices for the practice alongside the dock.

Opponents say both schemes are unsightly, and once council attacked them as "hideous".

## Canary challenge

THE Canary Wharf scheme in London's Docklands is to face a new legal challenge — from Greenwich council.

It will revive the Greater London Council's objections claiming it is now the "strategic authority" in the area. It wants changes in the towers, and extensions of the rail links south of the river.

Meanwhile, the Government looks set to compromise its "no expenditure" stance yet again by paying for a £40 million road link to Canary Wharf under Limehouse, on top of half the cash for the £90 million light railway extension.

## New town plan called in

PLANS for a 180ha new town in green belt at Crayford Marshes, Bexley, have been called in by environment secretary Kenneth Baker.

Architects for the scheme are Stanford Eastwell & Associates and the developer is Russell Stoneham Estate Management.

## Study finds against Penwith superstores

ARCHITECTS and planners Graham Moss Associates have produced a report that effectively tells environmental secretary Kenneth Baker to reject plans for major out-of-town stores near Penzance.

Baker is considering an inquiry inspector's report on no less than eight superstores proposed in the Penwith area, three of them near Penzance.

But a feasibility study carried out by Graham Moss for Penwith District Council, backed by

Penzance and the European Community, concluded that in-town development is vital as part of a comprehensive plan for the future of Penzance.

They say tourist and leisure activities will be boosted by encouraging retailers to put their investment in the town centre.

The harbour, in particular, needs regeneration, and to allow out-of-town superstores would undermine the economic base for any development there.

PRINCE Charles has decided to distance himself from the new RIBA inner cities committee.

This is despite the idea for the committee and its report having come out of discussion at one of the prince's now well-known community architecture dinners.

Although the new committee will be giving private royal reports each quarter, there is not expected to be any more direct connection.

At the launch of the RIBA's new inner cities policy in January, committee leader Fred Roche and institute president

By BD Reporter

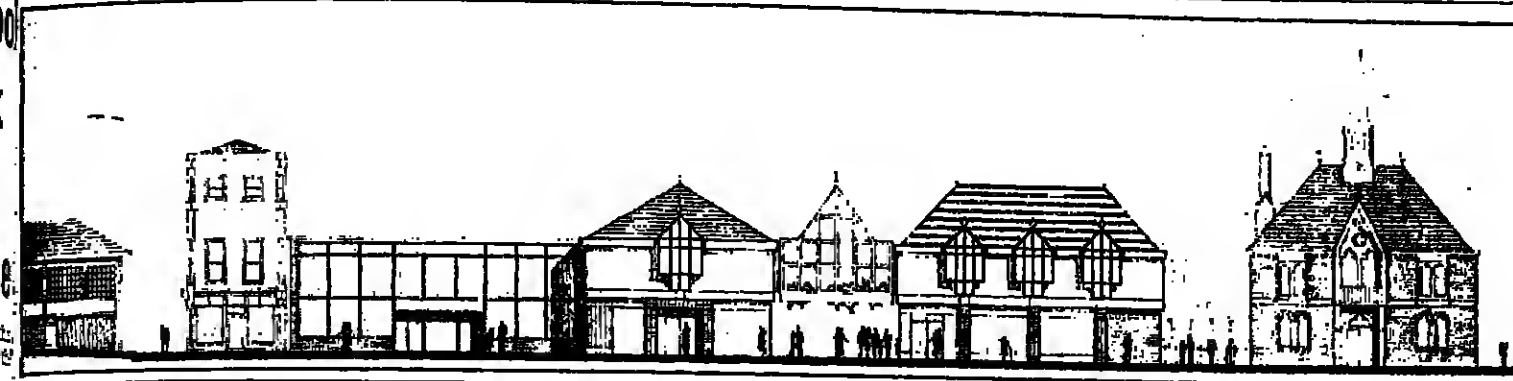
Larry Rolland claimed the prince was assisting the RIBA with its committee plans "all the time", and did not rule out his active involvement, other engagements permitting.

Other names for the committee show the RIBA has been successful in its attempt to link business and financial interests with those already working in regeneration projects.

People who have so far accepted invitations are: David Barker, chief investment manager of Norwich Union; David Coutie, housing development controller at the Halifax Building Society; Philip Chappell, formerly of Morgan Grenfell; Robert Davis, of Business in the Community; Ian Hay-Davison of accountants Arthur Anderson; community architecture group chairman Ian Finlay; Professor Peter Hall of Reading University; Donald Hoodless of Notting Hill Housing Trust; Ian Paterson, chief executive of Midland Bank; the chairman of Inner City Enterprises, Wyodham Thomas; and Pat Tindale, former chief architect at the DoE.

The committee is headed by institute vice-president Fred Roche, who also will chair the RIBA's "umbrella" committee on community and urban affairs that will include more architects.

Other representatives of the financial and property world



## Protests prompt public inquiry

Environment secretary Kenneth Baker has ordered a public inquiry into this proposed residential and shopping development in Lenes.

Designed by Gamble Cook Partnership, the development includes a 2,430sq m Waitrose supermarket, 150 flats and houses and parking for 300 cars.

Residents have protested about the plans, saying the facilities would attract too much traffic to the area. The inquiry is scheduled to start on August 5.

## Bellini tells all

ITALIAN architect and industrial designer Mario Bellini will give the Fourth Westbourne RIBA Lecture on interior design at the RIBA on Tuesday.

Bellini graduated in architecture in 1959 from Milan Polytechnic and has worked for Olivetti as head of office machine design since 1963.

His architecture includes a school near Padua, offices in Milan and the exhibition of treasures from St Mark's Venice. Details from RIBA Events, 01-580 5533 (ext 4334).

140000

As you can see, Hyload DPC has covered a great deal in twenty-one years.

When it comes to giving high performance, the Ruberoid Hyload DPC System is in the Formula One bracket.

Its track record speaks for itself. Right from the time it received the first ever British Agrement Certificate back in 1967, Hyload has been on the road to success. As the first pitch polymer DPC to be released in Britain it now has the longest experience on record and

it continues to go from strength to strength. This year it's celebrating twenty-one years at the top.

In that time, sales alone have clocked up over 140,000 miles. That's more than enough to cover central London or the whole of Birmingham! But it doesn't stop there. Hyload is still out in front successfully mastering intricate detailing at corners, around concrete columns

and changes of level in a style that Stirling Moss would appreciate. Which all goes to show, that if you select the right gear, you'll always be miles ahead of the rest.

**Ruberoid Building Products**

A member of the Ruberoid Group of Companies

GET IT OUT OF OUR SYSTEM

RUBEROID BUILDING PRODUCTS LIMITED, BRIMSDON, ENFIELD, MIDDLESEX EN3 7PP. TELEPHONE 01-895 3434. TELEFAX 29117 RUBENF 6

# Watch our next move

Enter 7 ON EXPRESS ENQUIRY CARD

**POTTERTON**



## BUILDING DESIGN

Building Design is published by Morgan Grahame & Pugh, Ltd., 100, Victoria Road, London SE1 1UL. Tel: 01-491 4000. Fax: 01-491 4001.

## The Editor's Comment



which was what Save hoped would be achieved for the Grand Buildings site, something which posterity would remember the 1980s by. In the meantime we continue, in the metropolis, to live a sort of design nightmare in which everyone from Prince Charles to Alan Bennett gives some overpowering reason why no new architecture should be created. There is just one sign of relief on the horizon. Norman St John Stevens, new (or quite new) guiding light at the Royal Fine Art Commission, has actually praised Camden Council for supporting Nick Grimshaw's excellent new designs for Sainsbury's in Camden Town. On the other hand, Norman wants to produce his own design guide booklet. Is it a helping hand or the offer of a poisoned chalice?

## Helping hands

The big surprise of the week has been the untoward fuss about the proposed alterations to St John's Lodge in London's Regent's Park by an American architect, Charles Young (English associate Michael Manser), in order to house the art collection of US collector Edward Koch. The building, formerly occupied by Bedford College, is one which the public knows nothing about, nor is there any compelling reason why it should. It is a fine building of its sort which has been extensively altered by architects over several generations, unnumbered by conservationist groups. The current proposal has prompted eminent art critic Brian Sewell to question whether Koch's collection exists, and has aroused the wrath of the usual rent-a-mob who seem to regard Regent's Park as a holy of holies, not to be touched by anyone without their express consent (ironically the mosque close to St John's Lodge by Gibbs is a living reproof to the dilettante preservationists). What has given this minor contro-

versy national status (a two-minute item on Radio 4's "Today" programme, front page stories in the *Daily Telegraph*), is difficult to say. But it looks as though English Heritage and its cohorts have decided to mount the sort of campaign they generated over Mansion House Square. In this context it is quite interesting to note that a major news story in the *Telegraph*, the whole tone of which was anti-Koch/Young/Manser and which failed to give any mention of the views of any of these three, was written by a paid official of the Save Britain's Heritage organisation. For the outside observer, the whole story has been blown out of all proportion. Does anyone care what they do with St John's Lodge, or which version of the past various interest groups have most reason to want restored? Why can't they knock the thing down and give us an entirely new building — it wouldn't come amiss in Regent's Park. Perhaps the architects could design something which would be an "exciting modern solution",

## The BS 747 Class 5 Amendment.

### If only they'd taken a leaf out of our book.



Will the introduction of the new BS amendment relating to polyester roofing felts mean that the specifier, at last, will know exactly what he's specifying? Sadly, life is never that simple, and it would be a mistake to assume that all Class 5 felts are now identical particularly as the Standard confirms the fact that they are not.

The features listed on the left, for example, would be a welcome inclusion in the new specification but won't be covered.

The unique Anderson HT350 system meets them all.

A system so superior to anything else currently available that a discussion of its technical advantages would fill several pages.

Suffice it to say in fifteen years actual usage in the United Kingdom it's covered over 50 million square metres, without a single reported incidence of failure.

An indication of fitness for purpose, that speaks volumes more than any amount of laboratory or mathematical model projections.

So, in future, are you going to be satisfied with roofing that only meets a minimum basic requirement — or a system that sets a higher standard altogether?

**ANDERSON ROOFING**

SEITTING BRITISH STANDARDS  
D Anderson & Son Limited, Stretford, Manchester M22 0YL  
Tel: 061-865 4444 Telex: 667389

If you're involved in the specification of High Performance roofing membranes D Anderson & Son Limited will be pleased to send you a complimentary copy of the full BS747 Inc. amendments.

## Infill

## Atwell at large



## Cuts that undermine education

WITH all the recent fuss about the Architecture Institute Working Party recommendations and RIBA policy over architectural education, surprisingly little attention has been paid to the report in March this year by the Transboundary Town & Country Planning Working Group.

Now whatever architects may think about local authority planners, and they frequently complain with some justice about the erratic quality of service they receive, it is surely in everyone's interest that standards (especially in matters of qualification) are raised. Consequently I am in some doubt whether the draconian cuts recommended by the working group can possibly meet the objectives of creating fewer, stronger "centres of excellence".

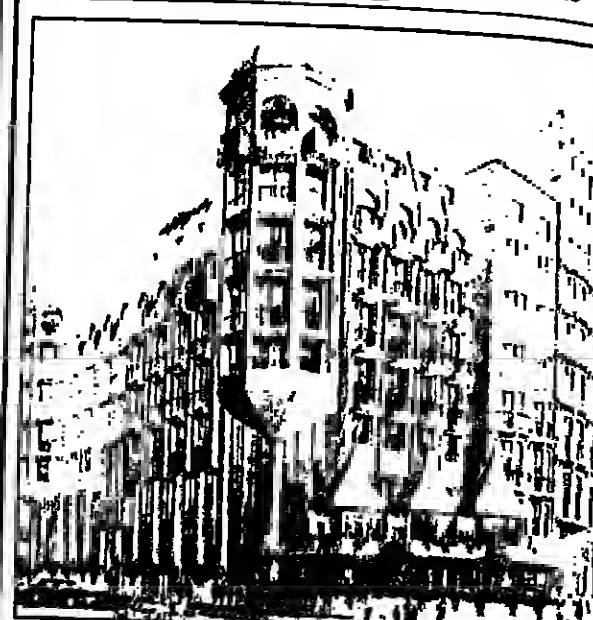
Let us briefly look at the existing situation: at present there are 25 planning schools, 14 in universities and 11 in polytechnics, already representing a cut of three public sector courses following the last NAB review in 1983. About 560 students will graduate this summer. The main proposal in the working group's stated aim to reduce output to the 300-400 range per year is to reduce the number of schools to 12, or 13, if one allows that no comment is offered on the course at Queen's University, Belfast (which is integrated with architecture).

The outright closures are drastic: both schools in Edinburgh, the university courses at Nottingham and Reading, the public sector courses at Coventry and Leeds polytechnics, and Essex Institute of Higher Education. Further reductions would be achieved by transboundary mergers of the polytechnic university courses at Liverpool and Sheffield, and a complicated 3 into 1 merger in London (north of the Thames) between University College, Polytechnic of North London and the Polytechnic of Central London. The final reduction would be to merge courses at Glasgow University/School of Art with Strathclyde University. All these closures would take effect with the 1987 intake.

As so often with this type of exercise, the reasoning and information available behind the working group's deliberations seems incomplete in certain areas, and the membership of the group itself is seen by many to be suspect. For example, the only heads of planning schools represented on the group of 10 members were from Oxford Polytechnic and Manchester University, and it comes as no surprise to see these courses among the minority recommendations. Again, while the group drew attention to the wide range of undergraduate degree courses in four different full-time and sandwich structures, one wonders whether sufficient time and consideration was paid to the diversification of training and experience within the schools.

At a time when the Norfolk Broads are to be given similar status to a national park and there is talk again of a designation for the South Downs, it would be appropriate to extend the Brecon Beacons National Park into the Golden Valley, both to protect its beauty and amenities for the future and to demonstrate that coordinated care for the environment should know no boundaries.

## News in pictures



## Grand Hotel rises from the rubble

This is the new block Igal Yawetz & Associates are adding to the banked Grand Hotel in Brighton. Their £12 million repair and development programme involves adding facilities and expanding the size of rooms at the front of the existing hotel. Permission has also been given for office block and residential apartments to the hotel. The 162-bed hotel will reopen in August, with the offices and space car park completed in February 1987.

## Lloyd's tradition

Here's another bit of the old in the new Lloyd's of London building to appease the tradition so beloved by underwriters.

While the installation of the Adam room has been stirring up not a little controversy, all seems quiet, fortunately, over the refurbishment of the earlier rostrum, which houses the Ladies' Ball. After the work is completed it will be installed in pride of place below the atrium.

Elliot's of Reading are carrying out the work, along with moving and fitting out the library from the 1928 building into the lower ground floor of the new building.



## Shops at Broadlands

Outline planning permission has been requested for shops and a swimming pool at Broadlands, home of the late Lord Mountbatten. The development, which would be away from the house and its Cavalry Brown-designed park, has been drawn up by architects Broadway & Butler. It comprises 6,000 sq m of retail facilities in two separate units, and a swimming pool.



## Printing money

This limited edition print of the Gaffry Museum in east London, from a specially commissioned watercolour by John Piper, is available from the Friends of Gaffry Museum. Proceeds will go towards projects, education work and acquisitions. The edition consists of 100 signed and numbered prints. Details: Mrs Z. Pews, Honorary Secretary, 97 Hertford Road, London N15 5LL.

## ROOFTEC '86

Royal Horticultural Halls, Westminster, London SW1

Sponsored by the National Federation of Roofing Contractors

Tuesday, Wednesday, Thursday, 24, 25, 26 June

ROOFTEC '86 should not be missed by anyone who has roofing work to specify or put to contract.

With exhibits by nearly 80 of the major manufacturers and suppliers, backed up by technical advisory services, it is a comprehensive display of the latest developments in the roofing industry that is unlikely to be matched until ROOFTEC '88!

Entry is free to all trade and professional visitors, but to facilitate admission and registration tickets are available on request from the Exhibition Office.

NFRC, 15 Soho Square, London W1V 5FB (Tel: 01-734 9164)

Editor 37 ON EXPRESS ENQUIRY CARD



The entrance hall at Spire House, Lancaster Gate. Luxury flats were built on the site of Christchurch, the original church walls being retained. Architects: GHW Partnership.

## 75 years of trustworthy building

This is the 75th year of Haymills building and development in the public and private sector.

- \* Britain's first housing estate (1922) with integral garages.
- \* Current multi-million pound contracts for British Telecom and British Airways.
- \* Complete refurbishment of a fire-gutted 18th Century listed house.
- \* The imaginative redevelopment of the site at 100 Piccadilly.

To such widely different projects Haymills bring consistent qualities: completion to time; competitive costs; high work standards; the ability to tackle difficult or unusual contracts. And craftsmanship of a high order. Haymills subsidiaries — specialists in joinery and shopfitting, plastering and bricklaying — regularly produce beautiful detailing in traditional and new materials.

### Better Building Faster

Write to us for a copy of LANDMARKS, our 75th Anniversary illustrated Brochure.

**HAYMILLS (Contractors) Ltd.**

Empire House, Hanger Green, Ealing, London W5 3BD. Telephone: 01-997 5602.

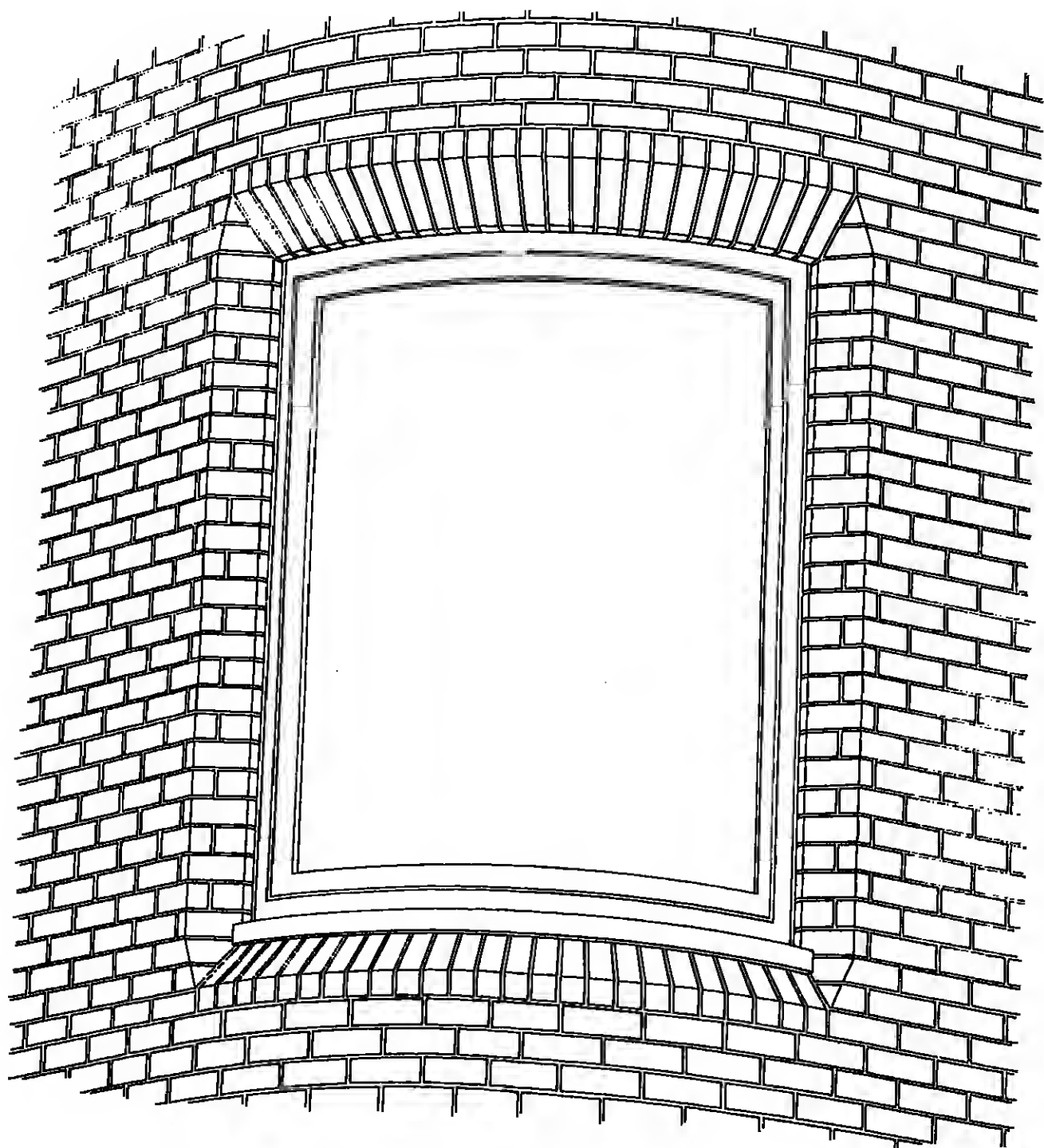
Haymills House, Station Road, Stowmarket, Suffolk IP14 1RF. Telephone: 0449 674021.





One in a series: Radial Brickwork

## SEE IBSTOCK TO MAKE BRICK WORK.



The Abbey National building in Reading literally follows the curve of the pavement surrounding it.

To resolve the curved details of the windows, Istock single cants were used for the window reveals and Istock standard specials for



the sills: both to great effect. It's just one example of how Istock are helping architects make the most of brickwork. For specialist advice on brickwork problems large or small, your nearest Istock Design Centre is at your service.

Architect: Broadway & Malyan, Weybridge.

## IBSTOCK

### BRICKWORK DESIGN CENTRES.

BIRMINGHAM: 197C Hagley Road, B16 9RD. Tel: 021-455 8080. BRISTOL: 43 Queen Square, BS1 4QP. Tel: Bristol (0272) 272766. CAMBRIDGE: 35 Hills Road, CB2 1NT. Tel: Cambridge (0223) 316999. GLASGOW: 13 Clairmont Gardens, G3 7LT. Tel: 041-332 3202. LEEDS: Leigh House, 32 St Paul's Street, LS1 2PX. Tel: Leeds (0532) 444473. LONDON: 29 Croydon Street, W1H 1PL. Tel: 01-402 1227. MANCHESTER: 72 Spring Gardens, M2 2BQ. Tel: 061-236 1580. WEST HOATHLY: Hudsons House, Sharpthorne, RH19 4PB. Tel: Sharpthorne (0342) 810678.

## Scorpio



### Surveyors aim for architects' work

THE Royal Institution of Chartered Surveyors has embarked on what can only be described as a concerted attack on architects' workload, from large commercial projects down to community architecture schemes. The question is: how will the RIBA respond?

A glossy 28-page full colour corporate brochure has been sent out to 12,000 specially-selected property developers, MPs, Whitehall mandarins, local authorities, banks and the media, called *Warning: not using a chartered surveyor can put you at risk*. Whether this is unnecessarily alarmist or simply comes under the Advertising Standards Authority ruling on "knocking copy" — now legitimate — depends on where you stand.

But in the A to Z "scope of the profession" section, everything which might be called architectural services is incorporated, from building legislation, to materials, design, contract documentation, project management, improvements, listed buildings and conservation areas and planning.

What really rubs salt into the wounds, however, is the choice of colour illustrations: the International Conference Centre at Broad Sanctuary, the NatWest Tower and Stock Exchange buildings, Lloyd's new bq, the Houses of Parliament and even the Honkers & Shakers all put in an appearance — and with no credit to any of the architects.

"Chartered surveyors," it reads, "have more influence than any other single profession over the appearance, quality and prosperity of the developing environment." Michael Patison, RICS secretary-general, hints darkly about the "hidden costs and poor construction management" that might arise when not employing one of his members.

LAST month Rod Hackney, now a developer, contractor and estate agent as well as architect, ignored a ban from "a senior vice-president of the RIBA" when he addressed 220 building surveyors at their annual briefing in Cambridge.

Surveyors had got off lightly while architects were at the mercy of hostile public opinion, he suggested, because they had not yet "raised their heads above the parapet".

WORCESTERSHIRE surveyor E R Heston has written to *Chartered Surveyor Weekly* demanding to know why architects "seem to be making all the running in the field of community rehabilitation and refurbishment projects."

"Can I suggest that the RICS general council take steps to emphasise, in the appropriate quarters, the relevance of the chartered surveyor to the expanding field of community activity," he writes. No doubt they will.

launch it books the upper walkway of Tower Bridge, and environment secretary Kenneth Baker to do the launching.

Come May 1, the bridge is there, but no K Baker. He does indeed set out by Government Rover with conservation chief Timothy Hornsby. On the Embankment colossal traffic jam: then car radio phone chirrup. Summons from Downing Street: return instantly. M wants briefing on Chernobyl.

So Benson, CT President Lord Duncan Sandys, Norman St John Stevas, the lately knighted Bernard Fielden and others of the Environmental Great & Good — not to mention the nice men from Istock who pay for it all — admire the view, then listen to poor Mr Hornsby trying to tell them what KB would have said.

### Scene and heard

WHILE the Queen is still expected to perform the autumn opening ceremony of Richard Rogers' £163m Lloyd's building, the insurance market's premises division has bravely offered a case of claret, a 1957 Chateau Montrose for wine buffs, for an appropriate name for the existing hq.

The competition, open to "nones" who must prove liquid assets of at least £100,000, has produced a magnificent response. Given the recent scandals surrounding some of the underwriters, the suggestions include Protectus House, Goldfinger House, Aywun House and Dunfleecin House.

CABINET reshuffles are again in the air, and one of the rumours circulating in Whitehall is that environment secretary Kenneth Baker is due to move to education to replace Sir Keith Joseph.

This could pave the way for the fifth man at the DoE since the Tories came to power in 1979: Heseltine, King, Jenkin and Baker all followed in rapid succession.

In case there are any Scorpio readers in the Cabinet Office at 10 Downing Street, my *Architect's Almanac* at the start of the year was meant to be a joke. Honest. Then I tipped Jeffrey Archer to fill the hot seat, followed later in the year by Norman Tebbit. On present performance my money is on housing, construction and inner city minister John Patten.

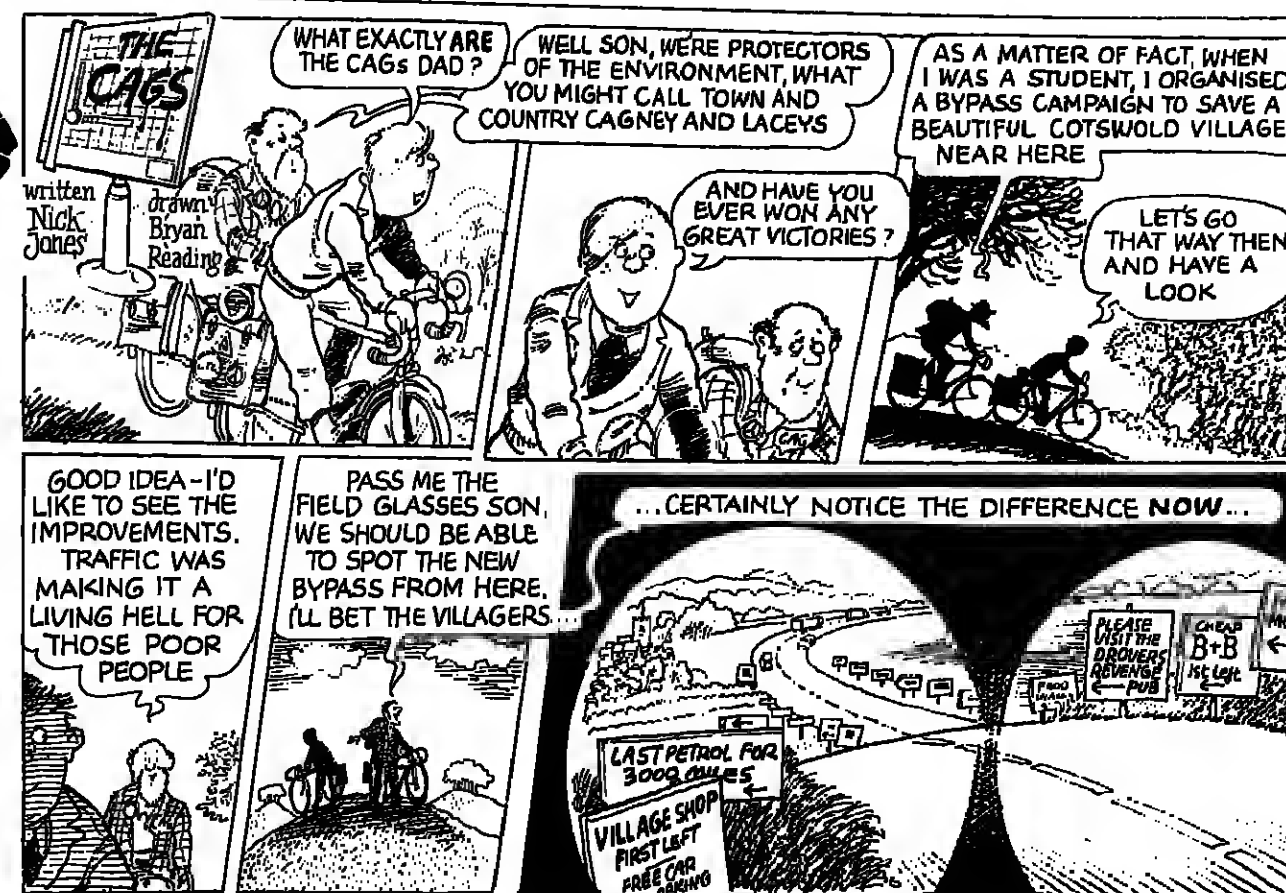
### Star guest misses party

THE Civic Trust, taking on a new lease of life under MEPC and the LDDC's Christopher Benson, invents "Environment Week" to publicise the work of its 1,000 plus local amenities societies. For the May Day

### 10 years ago

The International Solar Energy Society has called for a more organised approach to the use of solar power in buildings. Its current use in architecture is uncoordinated and lacks direction, says a report from the society. *Building Design*, May 7, 1976.

## Statistics



## Beating the System

In the past, in order to enjoy the cost advantages and quality control of factory built components, it was necessary to put up with the design constraints and application limitations of rigid systems.

Vic Hallam have refined their Derwent System to the point where it could be described more accurately as a fully fledged construction method. Innovative and improved structural techniques have resulted in the ability to meet

the demands of sophisticated designs and most commercial applications.

What has been retained are the benefits that a production flow line provides — precise cost control, effective quality control procedures and accurate programming.

Vic Hallam can work with your professional advisers or provide a complete design and build package.

Find out more by sending off for our colour literature giving examples of completed projects we have undertaken.

Please send me my colour systems leaflet. 80/1/2

Name \_\_\_\_\_

Position \_\_\_\_\_

Company \_\_\_\_\_

Address \_\_\_\_\_

Tel. No. \_\_\_\_\_ Telex No. \_\_\_\_\_

### Build the Hallam way

## Vic Hallam

Vic Hallam PLC  
System Building Division  
Head Office:  
Langley Mill Nottingham NG16 4AN  
Telephone Langley Mill (0773) 716141  
Telex 37426  
A member of the May & Hassell Group



# Council's work with tenants

From Noel Foley and others, architects division, London Borough of Hackney.

WE, as a small group of architects and designers working within the London Borough of Hackney, wish to raise some points in response to Nick Waters' "Stepping into the limelight" (April 18).

First, we find the final two paragraphs of his article insensitive and lacking in objectivity. Here in Hackney, within the confines of a large bureaucratic structure, some of us have been working successfully on community-based schemes since early 1980. For example, the Wenlock Improvement Scheme in Shoreditch, comprising works on and around 696 dwellings, was jointly set up by the DoE/London Borough of Hackney in November 1979, with the specific aim of involving tenants and their representatives in all aspects of the design and development of this

scheme. During the development of this five-year project tenants' representatives, architects and housing officers worked very closely together. This was Hackney's first coherent attempt in working with tenants and many painful lessons were learnt by all concerned.

Some of these lessons were subsequently applied to other projects, such as the Stonebridge Estate. This was a new-build scheme — part of which is now completed — designed and run from the architectural firm's site office between May 1981 and February 1984 with the full participation and involvement of the tenants from the existing blocks which were being replaced.

In addition, at Wren's Park Estate in Clapton, not far from the Lea View Estate, the architectural team worked closely with the tenants' representatives from May 1982 to October

## Letters

1985 in drawing design and development proposals through all stages for the redesign of this estate.

These three schemes are major projects involving very complex programming and resourcing arrangements — and they have been successful. Waters can of course check with the respective tenants' associations involved and obtain their views on the performance of council architects.

There are, of course, other schemes on the drawing board which are now evolving from the participation of community groups in design and development. As professionals we are keen to develop more effectively a coherent, rational and responsive approach to community architecture. We feel that the private and public sectors have a lot to learn from each other and we are willing and eager to engage in a rational and objective discourse on the social purposes of the apparently "autonomous" practice and urban design.

Waters' rather ambiguously worded article implies that only the private sector is successful in the field of community architecture. He is apparently not at all interested in the positive achievements of public sector architects as he completely ignored our offer made in our letter to him in April 1985, in response to his request for contributions to the proposed jointly written book by Charles Knevet and himself entitled *Community Architecture: how people should shape their own environment*. If he had replied in this letter perhaps his article might not have been so ambiguous, and apparently prejudiced against community architecture in the public sector.

Noel Foley, Ed Hughes, Peter Flack, Jo Wrenford (now Cazenave Co-op), Ian Seng (now Hartings), Rob Van Hone, Janet Price, Sue Newie, John Mitchell, Bernard Anker, London EC1

## Poor start for working party

From Tom Clay, Association of Community Technical Aid Centres.

I NOTE that there are no tenants participating in the Working Party on Tenant Participation set up by the Institute of Housing and RIBA (BD April 25). Not a very hopeful start!

Tom Clay, Liverpool L3

## A worthy analogy?

From Cedric Price

I AM indeed upset to have caused Messrs Backhouse, Bennett, Price and Campbell to "struggle for a relevant analogy" on my behalf (*Letters* May 2).

Such worthyls who are so desperately concerned about "dispute" and "irresponsibility" in the world of art (sic) should obviously be protected from the likes of me. By the by, I wonder whether their Mr Price's related to my mad cousin Peregrine Price of Bootle, who always wore both belt and braces?

Cedric Price, London WC1

## Admirable discretion

From Professor Sir George Grenfell-Baines, consultant, Building Design Partnership.

BEING abroad on April 11 when the "BD 100" return was published, one hopes a few comments will not be regarded as untimely or out of place.

First, one finds it a news-worthy item published with admirable discretion. Though more building design organisations are moving from partnership to company organisations, the information value of the survey might be increased by including the numbers of partners and associates in the firm.

Difficulty does seem to arise, however, with multi-disciplinary firms. For example, while the BDP ratio of qualified architects to staff is correctly stated as 194:1,008, a more accurate picture of the firm's basic structure would be the ratio of 790 prof/tech members to 1,008 total membership. One answer may be to separate or distinguish between multi- and mono-professional firms.

Whatever, one imagines your initiative will be welcomed by most BD readers.

In conclusion, it is just 50 years since beginning solid practice on the capital provided by winning third premium in the international competition for Parliament Buildings in Salisbury, being described in the media of the day as "an unknown student".

George Grenfell-Baines, Preston

## Computer jargon

From Geoffrey Broadbent

WHILE I was pleased to see your article (April 25) extolling the virtues of the Amstrad personal word processor, I'm not sure it served its purpose as well as it could have done. First, I thought it strange to follow a paragraph on "jargon and mystification" immediately with another one concerned with "256k memory... an integrated 90 character monitor, dot-matrix floppy disc drive."

Also those who have not yet "come to terms with word processing" need to know that you have a keyboard like a typewriter, a television-like screen with green letters which give you lines up to 90 characters wide and a printer which gives more than acceptable quality by the dot-matrix process. All the instructions to the computer are on 3-inch discs and your work is also stored on disks. Each disk will give you 160k of text, 50 pages, each side, although it's better to work in shorter sections and then join them together.

You could have pointed out also that while the Amstrad manual is thoroughly inept, there are several better ones, such as Hughes, J M *Mastering the Amstrad PCW 88526/8512*, Sigma (distributed by J Wiley & Sons Ltd) which are models of clarity.

But the thing your article misses is the sheer joy of using a word-processor, once you have sorted out how to work it.

Curiously enough, the first thing I did on the PCW was a book review for BD. Having worked on the first draft without even looking at it — which I thought would be so awful — I then started editing at 7pm one evening and next time I looked up it was 12.15am. Now we have machines which make the "sketching" and revising of writing so easy, and so cheap — BD paid for most of this one — can we please have an equivalent for the sketching and revising of drawings?

Geoffrey Broadbent, Portsmouth

## Independent choice

From P J Kirkham

THE specifier's problem in

attempting to select only better quality polyester-based felts, as outlined in Jan Sainsbury's article (*Opinion* April 25), unfortunately reflects a situation common to most building products, namely the difficulty of making an independent well-informed choice of selection, graded to a project's requirements.

Time prevents specifiers from mounting the in-depth research suggested in the article to discover the nature of critical constituents, even assuming that such constituents are commonly known. Basing choice on well-tried materials is one solution, but that is no way for an industry to progress, since it precludes innovation — polyester-based felts would have been stifled at birth! Also, specifiers who are required to demonstrate freedom from commercial bias cannot follow that path indefinitely.

What can be done to remedy the situation? In the same issue of your journal, Sylvester Bone's review of DES Design Note 46 (which deals with the maintenance of school flat roofs, and of which I was the main author) mentions the note's plea for the establishment of performance criteria against which membrane systems can be tested and graded, and which are related to performance requirements in service. Establishing such criteria, while by no means easy, seems to me the only method by which a specifier might make a proper independent selection from a range of products.

The sealant industry is showing the way with its "Sovam" performance rating system (DD121: 1985) and this concept surely demands serious consideration right across the product sector. For one thing, being numerically based, it is ideally suited to centralised data storage and computer-assisted selection systems.

Finally, it is clear, that in rejecting Silwa's "health" warning on variations in the composition and properties of polyester bases, a BSI committee has yet again allowed the interests of the consumer to be dominated by those of industry.

P J Kirkham, Taunton

Letters should be typed double-spaced on one side of the sheet and sent to The Editor, *Building Design*, 39 Colindale Avenue, London NW9 5EQ. We reserve the right to cut or amend correspondence.

# The only choice for promoters

From Mark Dudek

THE choice of a reconstruction scheme on the Grand Buildings site was, on viewing the nine competition finalists at the RIBA exhibition last week, the only choice open to the promoter, Land Securities.

As a participant trying hard to produce a design that was both "modern" and sensitive to the rich texture and history of Trafalgar Square, I found myself faced with the issue of complexity (and contradiction). How to be truthful to contemporary technologies and the supposedly non-hierarchical nature of modern office life and at the same time be sympathetic to the 19th century spirit of Trafalgar Square? I could not see public opinion accepting an essentially neutral Modernist extravaganza, such as the Richard Horden scheme in this location.

Contemporary buildings should surely be expressing the nature of modern life, which is more complex and paradoxical than ever before. The period of abstract expressionism in art, sculpture, music, in all the arts, has largely passed, except in views expressed by certain members of the architectural establishment.

Richard Rogers hints at the need for complexity as one of the reasons for decorating the outside of his Lloyd's Building with its structural and mechanical services.

In a similar way, Palladio festooned the outside of his Loggia del Capitaniato in Vicenza with allegorical scenes celebrating the defeat of the Turks at the battle of Lepanto. Both buildings have a complexity verging on confusion (a criticism levelled by the jury at several of the final stage submissions).

However, Palladio uses the conventional ordering device of giant Corinthian columns linking a strong base and top to impose an order which overcomes the disturbing chaos of the Lloyd's Building. The thematic and language Palladio uses are part of a tradition understood by both the architect and his clients. It is the subtle amendments he uses to revise the rules that make his buildings valid.

This competition proved that, given the opportunity, we still can't provide a solution to the

question of valid contemporary architectural language appropriate to our historic centres, relating specifically to the institution of the modern office building. The ground rules must be gradually redefined and relearned. Evolution, not revolution!

From a personal point of view, the competition enabled me to devote office time (three months) towards developing these ideas, which, given more years of exploration, could mature into a valid contemporary urban architecture. We can in the meantime bemoan this "appalling decision" without risking the embarrassment of more inappropriate, immature design proposals coming to the attention of the public at large.

Mark Dudek, London NW3

## Revise housing benefit system

From Peter Stoner

AS a previous resident, I was interested to read Amanda Baillieu's article (April 11) on the Bilton "scissor" blocks in Newcastle. However, I have found the story of the blocks' "failure" to be more complicated than the official view might suggest.

Suppose I was a resident of the scissor blocks and long-term unemployed. Whether I stay in the flats or get a transfer to a semi-detached council house in a better area of the city, my rent is paid for me by housing benefit. I may as well try to get a transfer because I would prefer a house and it would cost me nothing more.

Suppose I was a politician. To dem and that the scissor blocks be demolished and the residents rehoused is a safe campaign issue. No resident will object, knowing that he or she will go to the top of the rehousing queue with all removal expenses paid and disturbance allowances. The objections of anyone else are invalid because they do not have first-hand experience of living in the blocks.

The bill for the demolition of the blocks and provision of replacement housing was estimated by the city council to be £9 million, at 1983 prices. I am now rehoused in pleasant accommo-

dation in an attractive area, but I wonder whether this improvement in accommodation was worth £30,000 (my share of the £9m).

The present housing benefit system should be revised to ensure that alternative, better value for money schemes, appeal to residents. The interest on £9m would have covered the revenue from the flats many times over and in fact, the area housing manager was not aware of any systematic survey of residents' opinions ever having been carried out.

Peter Stoner, Newcastle

## 'Meddling' commission

From K L Renner

HOW thoughtful of the Royal Fine Art Commission to think of producing a design guide to show us what our buildings should look like (April 25).

My own architecture has already suffered from the Royal Fine Art Commission's meddling, so I can't help thinking that their guidance will only be

detrimental. Soon, the only way to get an approval for anything will be to make it look like Grand Buildings!

K L Renner, London W11

## All in the presentation

From Kit Evans, Building Design Partnership

NOW that the season of student applications for year-out employment is upon us, could I ask for your help in making students aware of what potential employers need in considering their requests? We get a very large number of such letters and try to reply to all, but it continues to amaze me how few students see the application as an exercise in presenting themselves.

On the basis that the letter tells one something about the person's approach to design, we discard all letters on lined A5or blue Basilidon Bond. CVs are helpful in indicating academic record, interest, and previous experience if any, but cannot do more than provoke either a refusal or a request for more evidence of design ability. Legible handwriting is just as acceptable as typing. What

really helps are a few copies of recent work so that one can decide immediately whether the applicant is likely to be worth interviewing.

If teachers could give their students more advice on this sort of thing, they would find offices much more receptive to their applications.

Kit Evans, London W1

## Guide to mediocrity

From Richard Scates and Ralph Carpenter

THE missing "ism" which Lewis Blackwell must be groping for (*Rossum* April 25) is "mediocratism".

Though we can fully sympathise with Norman St John Stevas' wish to demolish the worst post-war buildings, their replacement with mediocratism, which encompasses neo-classicism, post-modernism and the other escapist "because-the-planners-won't-let-us-do-anything-else" styles, can only be described as a cop-out.

The RFA is going to teach us how to do it: an *Essex Design Guide* for city centres? We all know the results of that. The

guide, while based on sound ideas, became a manual for those spec-builders and others who did not understand the underlying principles.

Will the RFA design manual promote the Grand Buildings Syndrome? Our towns and cities are choked with mansard roofs designed to "fit in" with the urban fabric, and housing is plagued with nostalgic motifs.

Some are waking up to the falseness of current architectural fashions.

The Sainsbury supermarket proposal in Bury St Edmunds, a shed disguised with brick and tiles and an arched facade (which incidentally was endorsed by Colin Amery, chairman of the Bath symposium) is being resisted by the local amenity and conservation groups. They have seen through this sham architecture and are trying to persuade Sainsbury's to build a good modern building.

Like or dislike Rogers' Lloyd's Building, it is positive architecture of our time. We must use our skills to progress and develop so that Lloyd's is not the last landmark of modern architecture in Britain.

Richard Scates, Ralph Carpenter, Bury St Edmunds

# SPACEGUARD

The new range of removable parking posts from Dee-Organ Ltd.



DEE ORGAN LTD  
Barrow-in-Furness, Cumbria LA13 7JH.

The posts illustrated above are only a small selection of our extensive range of parking control bollards. The two foreground posts (a) Spaceguard, (b) Spacemaster, are available in removable or permanent forms. The Spaceguard is manufactured from tropical hardwood and the Spacemaster from galvanneal steel with a dip coated PVC finish.

The Spacekeeper (c) is a collapsible bollard activated by a key. Bright red in colour with reflective bands, it is probably the easiest to install and operate of any on the market today. Please phone 041-771 1145 for brochure and price list or return the coupon below for full information.

**the Convenience Pack!**

This Flygt HDP Pump Station consists of a pump chamber, rotary moulded in high density polyethylene, complete with pumps, pipework and valves. The Package concept reduces civil costs and provides a complete fully automatic pumping station 'off the shelf'. The HDP Pump Station is suitable for new installations, or for use in existing chambers as a free standing unit. Single or dual pump packages are available and pipework can be installed to suit stations with a separately constructed valve chamber. Typical applications are handling domestic/Industrial effluents, and general drainage duties.

Send for Technical Details:  
**FLYGT PUMPS LTD.**  
Colwick Nottingham NG4 2AN. Tel: 0602 814444 Telex: 373118

Faculty of Architects and Surveyors  
15 St. Mary Street, Clifton, Bristol BS2 8JN  
Telephone: 0249 655393

**Can We Help You to Qualify?**

For sixty years the Faculty has provided support and unique specialised professional services.

It conducts recognised qualifying examinations, leading to corporate membership in Architecture (outside UK) and the following surveying sections:-

Building - Civil Engineering - Construction - Estate - Land and Hydrographic - Municipal - Quantity - Town Planning - Archaeological - Valuation

The Faculty gives direct corporate membership to holders of certain surveying and engineering qualifications, to Registered Architects and to Mining Surveyors.

Licentiate Surveyor membership is open to well-qualified Surveying, Engineering and Architectural Technicians and also advanced students of these professional disciplines.

Student membership is available to suitable candidates for our examinations.

For information please apply to Brenda Davies at above address giving brief details of present qualifications

**NEW RENDER TECHNOLOGY**

**At last: a render you don't need to decorate.**

Cullarend is a coloured render, texture, and weather protection all in one. Projection-applied in one single swift operation, it is fully compatible with all normal render substrates.

To have all the right ingredients accurately premixed in the same bag, needing only the addition of clean water, saves enormously on time as well as cutting out the guesswork in colour and consistency. Further time-saving comes from not needing to return at a later date to decorate — even when an immaculate white finish is required.

This one-coat technique also means that there is no risk of layers separating. Accidental chipping will never expose a different colour, either, because Cullarend is the same colour right the way through.

Specification is simplified, too, because a single product specification is now sufficient to cover all rendering needs — internal as well as external.

Blue Circle's constant research and development and its unrivalled experience of the building industry are enabling today's plasterers to create ever better finishes in about half the normal time while eliminating the traditional 1-2 weeks' delay for curing and the need for decorating. The key: 'one-coat' application — not only in rendering but in plastering too.

**Blue Circle**  
— there's no better guarantee

**PRECISION PRE-MIXED RENDER, COLOUR, TEXTURE, WEATHER PROTECTION**

- The very finest traditional ingredients, precision-mixed in a 40kg bag. ■ No more guesswork. ■ No risk of colour variation. ■ The plasterer simply adds clean water, mixes, and applies by projection in one continuous operation from start to finish, leaving no need for a second coat. ■ Completion time: less than 48 hours (not 1-2 weeks, as with ordinary render and decoration). ■ No further decoration required — even to obtain an immaculate white finish. ■ No risk of layer separation or of surface damage revealing a different shade. Cullarend is the same colour all the way through. ■ Choice of 6 subtle colours in addition to white. ■ Specify Cullarend with confidence. For colour samples and data sheets, please post coupon today.

Insist on Blue Circle plastering products by name

Blue Circle Sandtex Ltd.  
Therapia Lane, Croydon, CR9 4EY  
Telephone: 01-684 8838

Blue Circle Sandtex Ltd. is a wholly-owned subsidiary of Blue Circle Industries PLC



## Velvet underground



Crafted brassware and sodium light globes line the mirrored arcade.

WHEN the Trocadero reopened in London's Piccadilly Circus, the universal reaction was one of disappointment.

The show-biz style spectacle did little to hide the mediocrity of the complex — a tourist trap of speciality shops and restaurants with indoor events on the upper floors.

Given this experience, the Halpern Partnership decided to try harder with the underground arcade linking the tube station concourse to the old Swan & Edgar department store and out by escalators into Regent Street. The store itself is being revamped to the tune of some £2m, and almost half of that has gone on the tiny mall.

Architects Mike Blair and Paul Davis explain that they were looking for something of "an enduring quality" when they set about designing the mall. Though the practice had been involved in the total Swan & Edgar project since 1979, Blair and Davis took over the re-endeavour as a separate project in 1984, and seized the opportunity to uplift the tone of the local facilities.

Though the entire arcade can only take a maximum of five shops along one side with a

# BOLD WITH BRASS

A new arcade in Piccadilly Circus has attracted public interest, writes Arthur Talbot.

restaurant on the other, the design tries to accommodate different shopfront images and so be adaptable to change.

Blair and Davis had hoped that the units would be let to small speciality shops and a cocktail bar/fashionable restaurant. As the arcade opened prematurely on April 23, none of the shops had been fitted out and they were unenthralled by

Maxines restaurant, a development of an established steak house chain. But they are optimistic that their design will stand despite the "packaged" restaurant interior.

The most stunning feature of the mall is the crafted brassware, which accounted for some £500,000 of the total bill. The line of the mall is punctuated by specially designed open brass

The "packaged" chain restaurant seen was a disappointment to the architects. columns, which branch out over the ceiling to hold the large Saturn-style high pressure sodium light globes.

Mirrors are used on the ceiling, behind the columns and on the end wall to give the illusion of a longer mall. But the reflections they throw up have a more interesting effect than merely enlarging the space, not least in hiding the fire sprinklers

set into the mirrored ceiling.

There is, of course, the inevitable marble floor, chosen for its durability and fire resistance, but the diamond design of dark and light marble is a far cry from the overall pinkness of the Trocadero.

According to Blair, designing for quality materials is not without its difficulties.

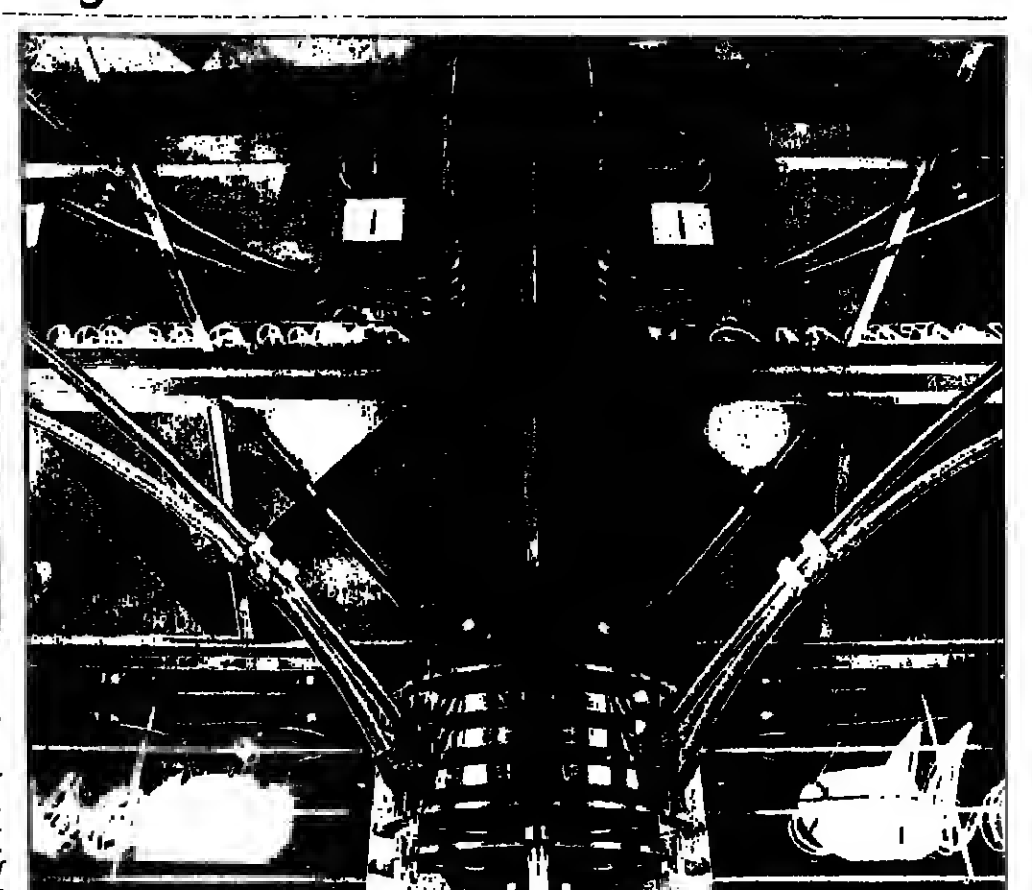
The original concept for the

brass light supports was a rectangular section. But the crafts people explained that this could not be done as the brass would buckle. In the end, the architects had to compromise and use a cylindrical section.

The Piccadilly Centre arcade has already attracted public interest. Until Swan & Edgar reopens on July 4, it will remain unfinished. But tube travellers

arriving at the underground concourse are starting to creep in to see what new delights the West End has on offer.

Client: Resource Financiere NV. Agent: Morgan Grenfell Laurie. Architects: The Halpern Partnership. Brass fabricators: L. Grenves of Sheffield. Interior contractor: Wilshires Interiors. Main contractor: John Lelliot.



Open brass columns punctuate the mall.

## More facts of life

**Fact:** BSC Colorcoat means the widest choice in steel cladding and roofing. No other material gives you so wide a choice of coatings and colours. No other can offer you so wide a choice of profiles and profiles.

**Fact:** Major UK-based profilers offer over 80 profiles in BSC Colorcoat, ranging from almost flat liners to very deep decks. There are curved profiles. Profiles that can be used diagonally or horizontally. Panel systems. Lining systems.

**Fact:** BSC Colorcoat profilers work closely with British Steel to make sure that quality always comes

first. And to make sure you get the technical back-up and service you can rely on.

**Fact:** BSC Colorcoat profilers provide flashings and accessories tailored to ensure accuracy of detailing.

**Fact:** British Steel and BSC Colorcoat profilers are UK-based: cutting delays in providing those extra sheets you may need in a hurry to complete a job.

**Fact:** BSC Colorcoat is the sure and simple way to broaden your design scope, and make sure that you get the results you want. BSC Colorcoat — there really is no equivalent.

## BSC Colorcoat—there's life in it!

### BSC Colorcoat Profilers

Ash & Lacy Steel Products Ltd., Shaw Street, Hill Top, West Bromwich, West Midlands B70 0TX. Tel: 021-556 4211.

British Steel Corporation, Newton Aycliffe Works, Aycliffe Industrial Estate, Newton Aycliffe, Co. Durham DL5 6AY. Tel: (0325) 312343.

Cape Metal Products Ltd., Claylands Road, Bishop's Waltham, Southampton SO3 1GL. Tel: (04893) 6255.

European Profiles Ltd., Llandybille, Ammanford, Dyfed SA18 3JG. Tel: (0269) 850691.

Precision Metal Forming Ltd., Swindon Road, Cheltenham, Glos GL51 9LS. Tel: (0242) 527511.

Ward Building Components, Widespan Works, Sherburn, Merton, N. Yorks YO17 6PQ. Tel: (0544) 70551-70555.

Adam G. Brown & Co. Ltd., 146 Crownpoint Road, Glasgow G40 2AE. Tel: (041) 556 7551. Telex: 779786.

The Atlas Trading Group, Oldham Road Saw Mills, Waterloo, Ashton-U-Lyne, Lancs OL7 9AZ. Tel: 061-339 2011.

Ayrshire Metal Products (Dumfries) Ltd., Royal Oak Way, Dumfries, Northants NN11 5NR. Tel: (03272) 77811.

Brown & Glass Ltd., Bankhead Crossway South, Slighthead Industrial Estate, Edinburgh EH11 4EZ. Tel: (031) 443 4455.

Euro-clad (South Wales) Ltd., Building 85, Seawall Road, Tremorfa, Cardiff CF2 2TH. Tel: (0222) 482902/3/4/5.

Stramit Industries (UK) Ltd., SpeedDeck Division, 27 Causeway Road, Earlsbarn Industrial Estate, Croy, Surrey CR9 3DU. Tel: (0314) 62011.

Please tell me more about BSC Colorcoat—the steel cladding material with life in it.

Name \_\_\_\_\_

Company/Practice \_\_\_\_\_

Address \_\_\_\_\_

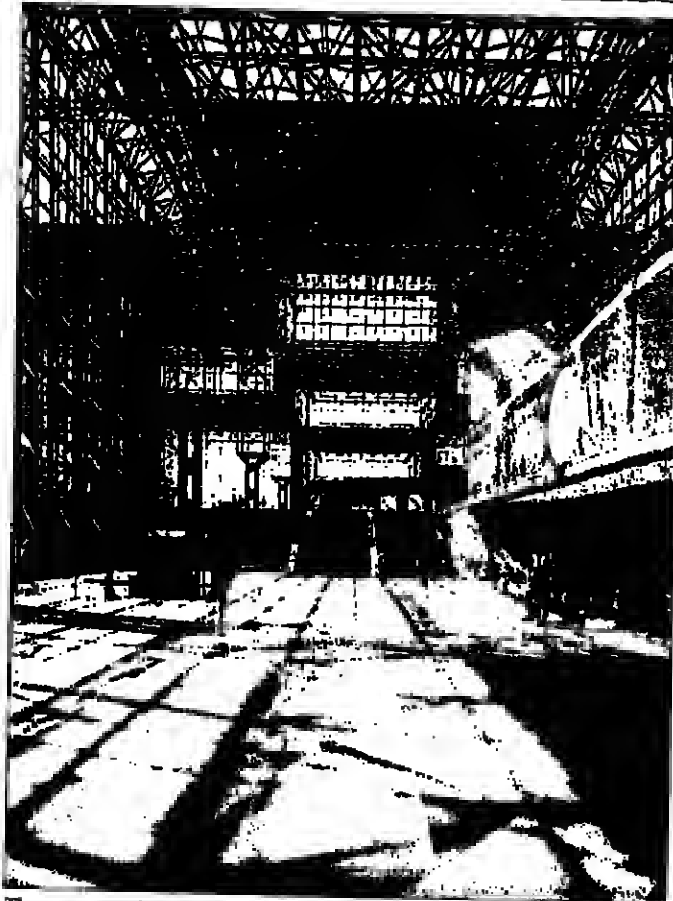


Telephone \_\_\_\_\_

Post to: Sales Promotion Department, BSC Strip Mill Products, PO Box 10, Newport, Gwent NP23 2TB.



## Notes from New York



The concourse (level 2): A 1,000ft-long circulation space.

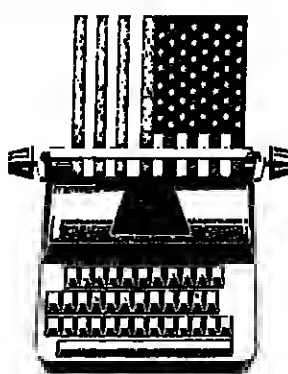
Dear Reader

THE Jacob K. Javits Convention Center of New York officially opened on April 9. The building is large — in physical size and its architectural ideas and urban intentions.

Designed by I. M. Pei & Partners, the 1.6 million sq ft, \$486.2m centre occupies a 22-acre site on the West Side of Manhattan. Bounded by 11th & 12th avenues and 34th & 39th streets, the site is between the Hudson River to the west and derelict warehouses, railways and manufacturing industries to the east.

A replacement for the old New York Coliseum, the new Javits Center is intended not only as a venue for conventions and exhibitions, but also as a source of civic pride and revenue, and as a catalyst for the area's imminently-predictable real estate development.

Unlike the quintessential New York building type — the skyscraper — the centre is low: it has only four levels. Foundations, columns, beams and slabs on the lower exhibition level are all concrete. On the upper exhibition level, and in the public spaces, the structure is a steel space frame of 90ft x 90ft



bays, painted grey. (The 90ft dimension was derived from the basic 30ft module of exhibition planning: two rows of booths 10ft deep, separated by an aisle 10ft wide.)

The space frame is supported on "champagne glass" columns of four tubular steel legs with an inverted pyramid welded to the top. The frame itself is composed of a 10ft x 10ft superstructure, a 5ft x 5ft grid, and 1ft 3in increments. The effect is of lace. Reducing the depth of the 90ft clear spans from the rule-of-thumb 6ft to a modular 5ft allowed the space frame to form precise 45 degree chamfers at bay ends and tops. These chamfers help minimise and articulate the long, low mass of the building.

Unlike the usual convention centre — an unlovely, undecorated shed — the Javits is sheathed in slightly reflective, grey glass. By day, the building mirrors the Manhattan skyline; by night, as the press says, it "glows with transparent beauty".

The centre's six exhibition halls extend across the building. They are large and very large: the three halls on level 1 total 230,000sq ft, with ceiling heights of 17ft-20ft; the three on level 3 total 410,000sq ft, with ceiling heights of 33ft-38ft. Both levels have the flexibility to be used either as three separate or one combined space.

To facilitate rapid erection and dismantling of shows, the convention centre's 12th Avenue (goods) side was designed with 50 covered loading docks on two levels and with six drive-in ramps for on-floor lorry access.

On the 11th Avenue (people) side, a change in contour has been exploited to create a two-level entry/exit system. Beginning at the lower 39th Street end and cut south to 34th Street, a dedicated six-lane roadway provides bus and taxi access to the 1,000ft long concourse. Intended primarily for circulation, this 65,000sq ft public space also functions as a convention registration area.

Off 35th Street, at the high point on 11th Avenue, pedestrians enter immediately into the centre's great hall. An honorific public space 270ft square and 150ft high, this "Crystal Palace" uses contemporary technology, the space frame, to create almost Baroque effects of powerful massing and complex detailing. While the roof rises vertically in two tiers — first in a cruciform of four bays, then as a single lantern of one — the space extends laterally into the exhibition halls on level 3 and overlooks the concourse's long horizontal on level 2.

Still under construction, the gallery on level 4 is intended as an internal, urban "street"; eventually to contain shops,

services and a restaurant. The land side to a great public space, the River Garden, and two outdoor terraces on the waterside. The view will be drop-dead. (One would it have been possible to provide glass directly from the "Crystal Palace" out onto the Hudson, visually uniting the city and river within the convention centre's primary public space.)

The convention centre includes a 30,000sq ft events hall; an adjacent 100,000 sq ft "lobby"; and 131 rooms of various sizes, mostly to be equipped with state-of-the-art video projection system, the building provides full access for elderly and the handicapped (New York's Senator who died on March 7, in a wheelchair during the last of his life.)

Directly across 110th from the great hall, a one-acre outdoor plaza has been planned; landscaped with fountains, trees, and a performance area. It will provide additional bus arrival and departure lanes, and belittles the centre by an underground promenade. The plaza, moreover, will symbolise the centre's connection to the neighborhood (once known as Kips Kitchen) whose renaissance is presumed to inspire. Plans are already being drawn up for a 50-storey hotel, a television production facility, and a new gain relocated Madison Square Garden.

Pei's office began designing the centre in 1979, at a time when New York City was in the throes of its fiscal crisis. Largely because of errors in fabricating the space frame nodes, completion was two years behind schedule and \$10m over the original budget. But now it's up to the fine; and it's expected to generate \$1.5 billion of economic activity in its first year.

Sometimes, New York gets the architecture it deserves.



The grid on the reflective, grey glass reiterates the space frame's module.

The American edition of Oxford University Press, with the Society of Architectural Historians, is to publish a 70-volume series: *The Buildings of the United States*.

Modelled on Pevsner's *Buildings of England*, the series ultimately will comprise one volume for each of the 50 states, and one for each of 20 major cities. Written by local architectural historians, each volume will contain some 2,000 entries photographically organised, 400 glossaries, and a general essay on the specific region covered. Adolf K. Placzek, librarian emeritus of Columbia University's Avery Architecture Library, is to be the series' editor-in-chief. William H. Pierson, its co-editor-in-chief.

Funded in part by a \$200,000 matching grant from the National Endowment for the Arts, the first four volumes — are scheduled to appear in 1988. Subsequent volumes are to be published at about five a year.

Commenting on the 46-volume Pevsner series, Placzek noted: "We Americans are

dealing with 300 years of history; the British deal with 1,800. On the other hand, we have a much larger territory to cover."

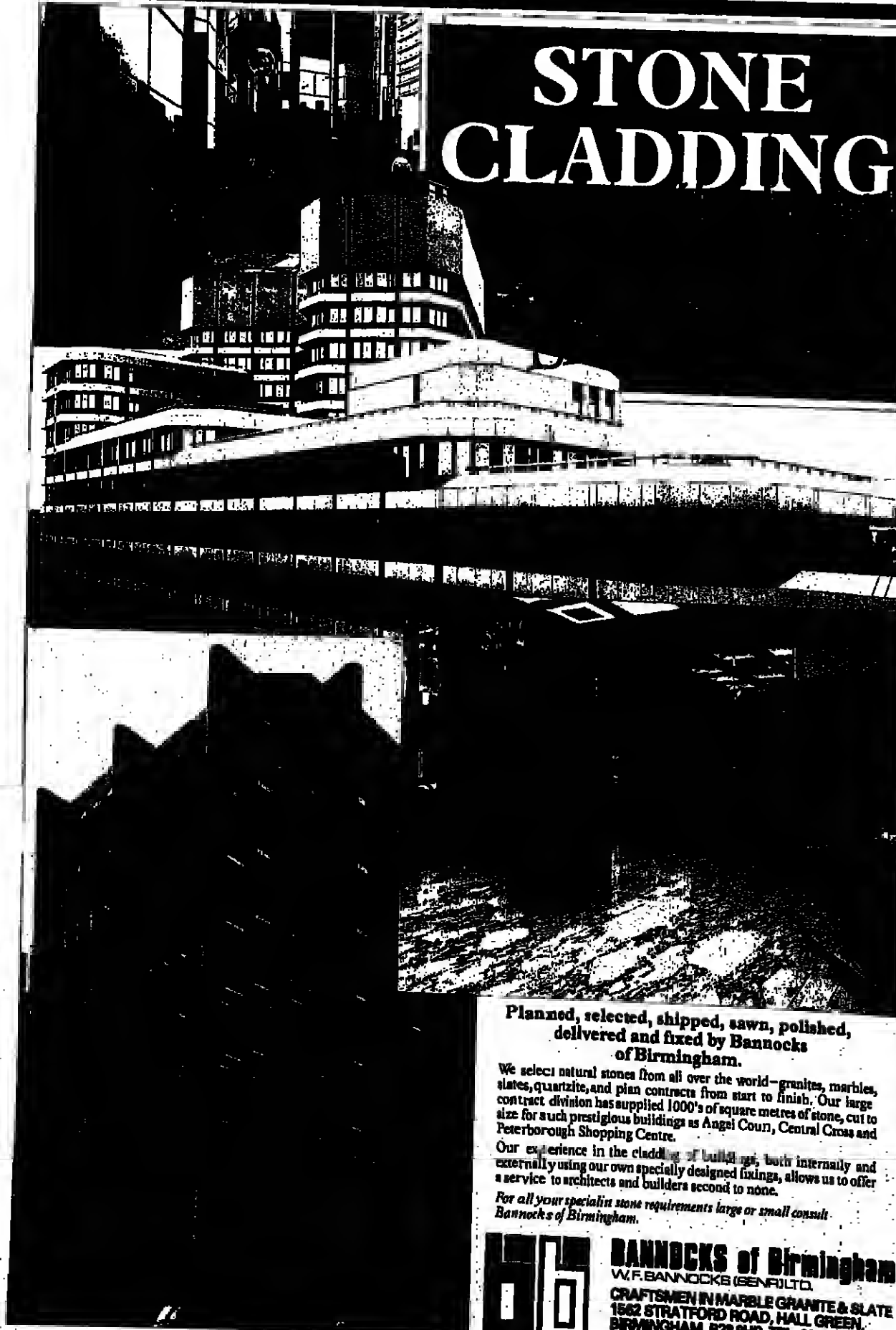
Went to a fashion show last week. Want to know what "In" Architecture is? Cotton Incorporated, it's the six "lifestyle influences" featured in American editions for spring-summer.

The influence of tonics was apparent in softness of such Florida as Miami Mauve, Bevels, and Portico Pink. New romance with the skyline emphasis — slender, vertical lines — historicism was revived as of Ionic capitals and veranda streetscapes; patterns of time mosaics and Gothic glass windows.

Architecture's on the canvas as well as on the drawing board.

Sandy H.

## STONE CLADDING



Planned, selected, shipped, sawn, polished, delivered and fixed by Bannocks of Birmingham.

We select natural stones from all over the world — granites, marbles, slates, quartzites, and plan contracts from start to finish. Our large contract division has supplied 1000's of square metres of stone, cut to size for such prestigious buildings as Angel Court, Central Cross and Peterborough Shopping Centre.

Our experience in the cladding of buildings, both internally and externally using our own specially designed fixings, allows us to offer a service to architects and builders second to none.

For all your specialist stone requirements large or small consult Bannocks of Birmingham.



**BANNOCKS of Birmingham**  
W.F. BANNOCKS (GEN. MGR.)  
CRAFTSMEN IN MARBLE GRANITE & SLATE  
1562 STRATFORD ROAD, HALL GREEN,  
BIRMINGHAM, B28 8HE. TEL: 021-748 1181-7  
TELEX: 337676 OR 337623

# Tecno

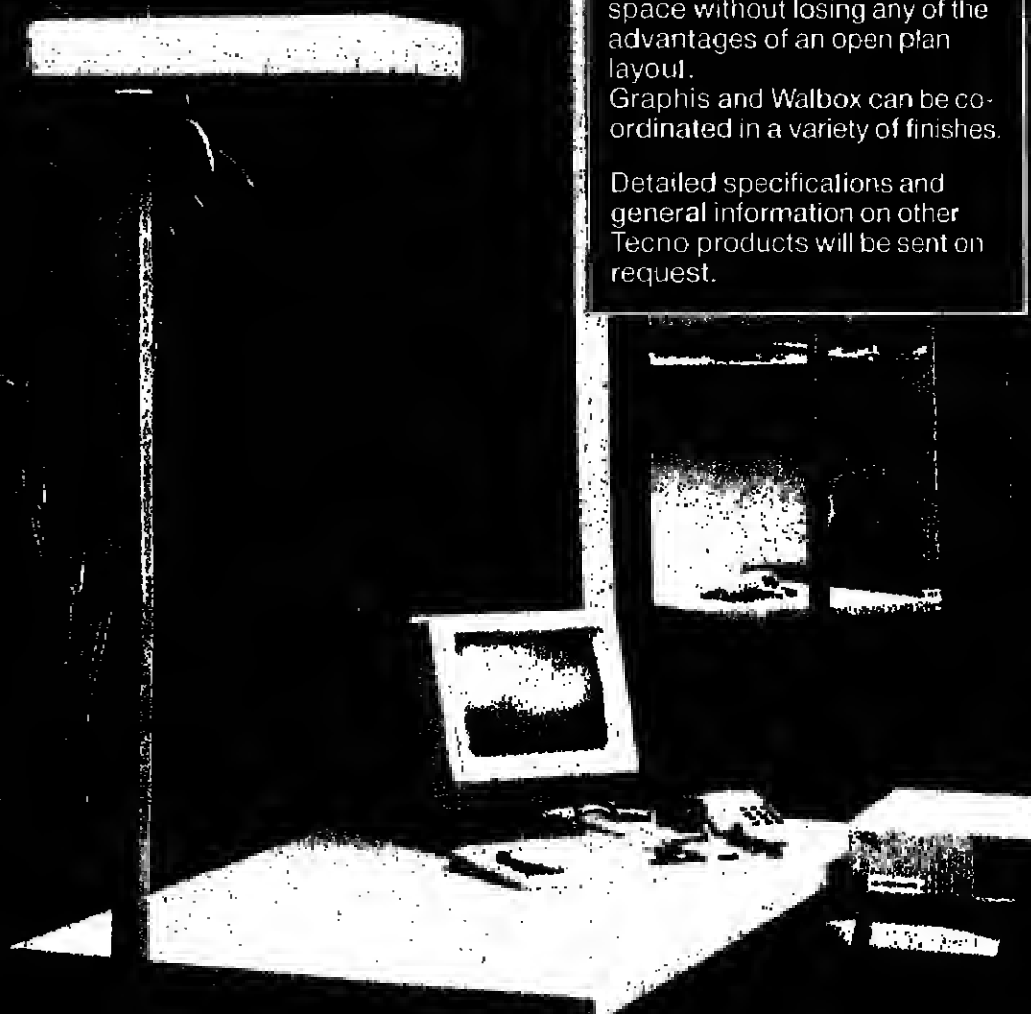
Quality furniture by design

Showroom: 19 New Bond Street  
London W1 01-629 0258

Graphis and Walbox systems co-ordinated to create a semi-open plan. The need for visual privacy, sound separation and storage space near the utiliser is resolved with floor to ceiling storage-partitions dividing the space without losing any of the advantages of an open plan layout.

Graphis and Walbox can be co-ordinated in a variety of finishes.

Detailed specifications and general information on other Tecno products will be sent on request.





## Belfast

It was I and we'd just dropped the Town & Country Planning Association director, David Hill, off at his central Belfast hotel; I was with the chairman and secretary of the Divis Residents Association.

Just a few streets later, as the stark outline of the flats loomed up, our cab was forced to stop at an unmarked red car pulled in front of us. Four heavily-armed RUC men ordered the driver and my hosts onto the road — they were ordered to turn all lights out and leave the doors wide open. I sat there till a torch was pushed into my face and the questions began.

I told them I was an architect working with the community of the flats — "Fine... community that is" was the sarcastic reply. I sat and watched the arrival of another car and two armoured jeeps; now there were about a dozen RUC men in a wide ring around us, most of them with machine guns. Finally I was ordered out onto the road and questioned at length — who I worked for, my home address, just exactly what I was doing in Belfast. I insisted I was an architect going about my legitimate business. Again, the sarcasm, "D'you know the sort

of people you're associating with?" I protested they were elected members of a community. In the background I could hear scraps of bitter conversation between my hosts and the RUC. "We'll get your lot", "You tried in '69 and didn't succeed then". Finally, the senior RUC man glanced at me and said to the others, "At least Gerry Adams and I agree on one thing — Brits Out! Once they're gone we'll sort you lot out." We were kept in the middle of that road for well over half an hour. It was dark with no-one around except ourselves and a dozen armed men in uniform.

A while later, lying in bed in the Flats, I heard the joyriders racing the cars around the asbestos-strewn tips surrounding Divis but I wasn't interested, I'd seen it all before. At 5am I was woken by the clatter of the helicopters and went to the window. It was an eerie sight seeing the whole complex lit up by the powerful searchlights of the choppers at that hour of the morning. A couple of cars smouldered down below and I looked up at the long-range cameras in the army post on top of the Divis Tower.

Two and a half thousand people live in Divis. Most of them have said to me: "It's a

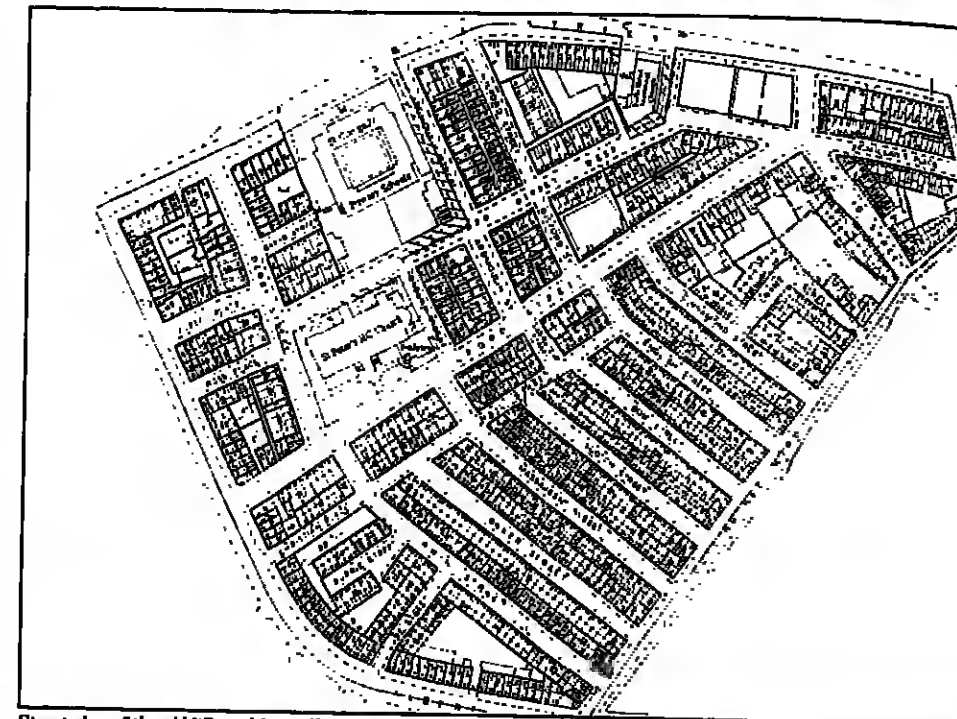
punishment block, we're being punished." It's what I have experienced is typical, then I can understand their feelings.

As the native Irish fled to Belfast from the lamines of the west in the 18th and 19th century they were denied residence inside the city and settled in a swampy bog and cattle pound outside the walls through which ran a clear stream. The area became known as the Pound Loney (Loney, Irish for "clear water"). The Loney, an impoverished but vital working-class mill community, existed right up to 1966 when it was demolished to pave the way for the Divis Flats complex.

The Loyalist-controlled Belfast City Council instructed the Northern Ireland Housing Trust, which commissioned the French "Seetrs" system to build 12 eight-storey, interconnected slabs and the 19-storey Divis Tower, containing 795 units and 2,833 bed-spaces.

It is argued by the authorities that it was the wish of the community to have Divis built as a replacement to the slums of the Loney; in reality the pressure came from the financial incentive to both Government and large contractors to build cheap, quickly-erected, factory hous-

## PUNISHMENT BLOCK



Street plan of the old "Pound Loney" area, demolished to make way for...

ing — and it also came from the influence of the motorway plans cutting right through the old neighbourhood. The housing trust admitted that "the old houses must be swept away to provide free flow for the traffic; the people must be prepared for the adventure of living in high flats".

Some protested against the project, among them Gerry Adams, the present MP for the Divis area. "Low rents, not high flats" was the slogan as the offices of the trust were picketed and occupied. But a combination of slick salesmanship and hard sell, coupled with the political power of the Belfast corporation and the moral imperatives of the Catholic church (which wanted its flock neatly confined), defeated the protesters who were branded as "communists" from the pulpit. The church even went so far as to admonish the parents to "respect and preserve the good conditions made available" and warned that "this kind of property must be respected".

The people of the Loney who desperately wanted better conditions (as did the protesters who argued for improvements based on the "ethos" of the old neighbourhood) were bewildered, but it didn't take long for them to discover how they'd been cheated. "We thought we were moving into palaces with inside toilets... then we found the inferior workmanship, the east-cutting, the damp, condensation, fungus, mildewed clothes and furniture... noise from everywhere and, most of all, loneliness and fear," as one resident recalls.

Worse was to come: in 1969, with Divis still incomplete, the streets of the Lower Falls were burnt out by Loyalist mobs and the people fled into the complex. So, from the start, Divis has been a place of refuge, having more in common with the settlements of West Beirut than with any other housing estate in this part of the world. Before it was even finished, Divis was described as "Europe's youngest slum" and has since been termed "the worst housing in Western Europe".

Considering the facts, that is no exaggeration. It is true that the environmental and social problems of Divis can be echoed in other system-built estates: damp, and the related illnesses springing from this (asthma, bronchitis); vermin infestation (rats, cockroaches which breed in the ill-functioning beating systems and rubbish shutes); a lack of maintenance because Divis is a "war-zone"; unem-



Still smiling in a crumbling slum.

ployment of 80 per cent plus; children falling to their death from balconies (one four-year old boy drowned in an open sewer); endemic poverty (25 per cent of the community lives below the official poverty line of the six counties).

But on top of all this Divis suffers problems no UK estate faces (yet). The punitive "Payment of Debt" Act (operating only in the six counties), meant to counteract the rental strike against internment without trial, hangs like a noose around the necks of the Divis people with the money taken as source from social security payments.

It has created a vicious circle of impoverishment for a whole community and allows the enemies of the Divis people to rationalise the continued existence of the Dreadful Enclosure. As the *Irish Times* pointed out: "The Rev Robert Bradford, Official Unionist spokesman and a member of the Housing Executive's advisory council, constantly reminds the authorities of the debt owed by the Divis people and says they cannot expect rehousing while this exists".

...the Divis estate. Drawing by Lewis Walker.

In due course a "clean-up campaign" was organised by a young priest and young and old were exhorted to "lend a hand and clean up the complex in one week". This was followed by a community festival in which even the local IRA units played a part, warning they would take "stern measures against anyone who interfered with the enjoyment of the people in any way".

But the more radically-minded within the community realised that a disaster like Divis could never work and the Divis Demolition Committee was formed to harness the deep-rooted anger of the community which really wanted to see the end of the Flats. The group wrecked flats as they became empty until its leaders were arrested. Though convicted, the judge imposed a nominal fine and took the opportunity to condemn the Housing Executive, saying: "It is terrible that, in 1981, I have to sit and listen to such a state of affairs. Something must be done about Divis, and soon."

Everything about Divis was reminiscent of a prison. It looked like one, the "inmates" were under constant surveillance, armed "warders" patrolled the corridors; the clean-up campaign was only a desperate attempt to make the prison bearable, with even the IRA having to support this reformist action. Finally, the prisoners attempted to destroy the prison and were arrested for their pains.

Under mounting pressure the Northern Ireland Housing Executive agreed, in 1982, to the demolition of four of the blocks (though, in the event, the Westminster-controlled DoE would allow only two) and offered a substantial renovation of the rest of the complex. The residents, accepting demolition, refused to countenance major refurbishment, arguing that to do so would condemn them and future generations to the complex. Nothing happened for two years, when the two blocks did go, though leaving behind a dangerous asbestos problem.

By then, the community had organised a whole array of Divis projects to both cope with day-to-day life and to assemble the hard evidence for a major demolition campaign.

The Divis Play Project; the Divis Education Project and the Divis Drop-In Centre were among those which tried to meet the lack of facilities in the complex and counteract the infamous "name" which Divis had inevitably acquired. The

The Divis estate in Belfast has proved not just a conventional housing disaster story, but a social, economic and political nightmare, says Brian Anson.

Environmental Health Project and the Divis Residents' Association sought to build up a campaign based on hard evidence that the Flats were irredeemable.

As an umbrella organisation for all the projects the Divis Joint Development Committee was formed. Divis never lacked research — it had fast become a ready-made subject for the dissertation, the thesis and sociological and anthropological study. As one resident said, it was being "surveyed to death".

The TCPA's Mobile Planning Aid Unit visited Divis in the summer of 1985. At that stage the Housing Executive was offering the demolition of two further blocks, but only on condition that the community accepted full-scale rehabilitation of the rest of the complex. As the *Irish Times* pointed out: "The position of British Ministers is that no improvement work of any kind will go ahead unless refurbishment is accepted." In the view of the residents' association this was blackmail.

It seemed to us in the TCPA Planning Aid Unit that Divis was caught in yet another trap. Though notorious and gaining much publicity in the Irish press,

as well as being featured constantly as a backdrop to plays, films, and documentaries, its publicity had become confined to Ireland alone.

This made it easier for the authorities to either retain the status quo, or to impose conditions for any real steps to ameliorate the situation.

We agreed to mount a major exhibition in the heart of London, where the decisions were really made. We deliberately chose to mount the project in the most salubrious venue we could — the TCPA's own headquarters in Carlton House Terrace, a stone's throw from Parliament, and we aimed the exhibition, not at the converted, but at the powerful and influential. The TCPA executive committee published a detailed policy statement giving full support to the community's demolition campaign, and we brought 16 of the residents to London as it was only through them that the real truth could be established. The event gained considerable success in the media and had a profound effect upon all who saw it. As the TCPA chairman wrote: "I well remember the complete stillness in our press conference when the residents explained to the national and regional press

just what it was like to live in Divis."

Since the exhibition last November (which has now been seen at three other venues) a number of significant things have happened. The Northern Ireland Office and the DoE (NI) have responded hysterically (and sometimes abusively) to the policy statement, accusing the TCPA of professional irresponsibility and political naivety — particularly as regards our linking the intolerability of the Flats with the constant military presence in and around Divis.

Our response is that it is precisely this link which makes Divis the worst housing environment in Western Europe. We invited anyone to meet us and a meeting was subsequently arranged with the authorities. We made it clear that representatives of the Residents' Association would attend any such meeting.

At the last minute, the meeting was cancelled with the authorities arguing that "the future policy for Divis has been approved by the minister. It would be quite inappropriate for officials to discuss with the TCPA and representatives of Divis, proposals for the Flats".

continued page 20

# A RANGE OF HIGH QUALITY TRADE PAINTS.

(WITH A RANGE OF HIDDEN QUALITIES)

Formulated with pride for the professional decorator. Brolac's high-quality characteristics ensure a better, more satisfying all-round performance.

Brolac does you proud whatever the job. No other paint offers the same high-quality balance of opacity, coverage, colour, durability and ease-of-use.

Brolac offers a wider colour selection. You can choose from the full BS4800 range or from the very latest in fashion colours. Let your imagination run free.

Thanks to continual research and development Brolac is the paint of the future. Better products and higher standards are guaranteed for today and tomorrow.

Brolac is backed by our highly experienced Professional Advisory Service. All the advice you may need, from technical to colour, is free for the asking.



The Brolac range is probably the most comprehensive available. There's a specialist product for the most difficult surface. You can always take pride.

Brolac is more than just a paint. It's a guarantee of a job done with pride. Take pride by contacting your local Brolac representative today.

TAKE PRIDE ■ TAKE BROLAC

THE PAINT THE PROFESSIONALS CHOOSE

BERGER DECORATIVE PAINTS, PETHERTON ROAD, HENGROVE, BRISTOL, BS99 7JA. TELEPHONE: BRISTOL (0272) 837326

## Take CAD further with GDS.

We take CAD further because we specialise, which means we can offer the architect specialist systems designed specifically to cope with the drafting and design tasks found in all architectural offices both large and small.

At the centre of all our CAD systems is the powerful McDonnell Douglas Graphics Design System (GDS) which is widely acknowledged as the leading architectural CAD system available today, offering greater accuracy, fast repetition, rapid amendment and high speed output to any scale.

To take its capability even further you can add to this specialist architectural packages like

our modelling and viewing systems, ART a paintbox system of particular value to architects, both in sketching initial ideas and in creating full colour visuals for client presentation, plus many other packages all designed to aid the architect.

It pays to use CAD systems which are used by other allied design disciplines. GDS is used by civil, structural and building services engineers throughout the world.

Find out just how far we can take CAD, contact the leaders in Computer Integrated Construction Systems.

**MCDONNELL DOUGLAS INFORMATION SYSTEMS LIMITED**  
Melton House, Guildford Road, Woking,  
Surrey, GU22 7QH. Tel: 04862 26761

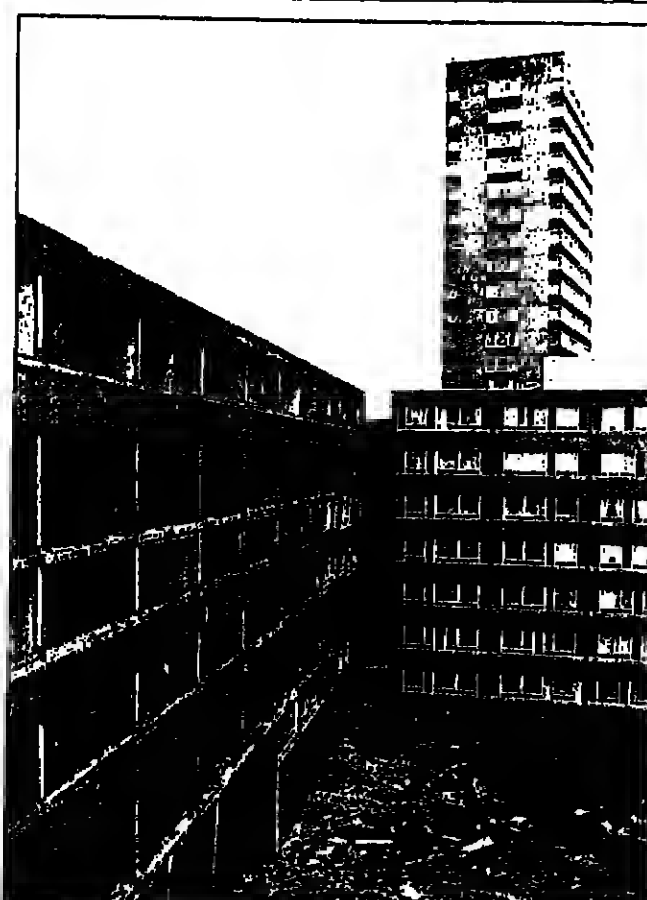




The TCPA planning old bus on site.



Divis exhibition banner.



Flats plus tower, complete with army look-out.



Routine patrol on graffiti corridor.



Housing without hope.

When she is old enough to perform  
with the Philharmonic Orchestra,  
KYNAR 500®-based coatings  
will still be young.

Years from now, when she is an accomplished musician, exterior metal finishes based on KYNAR 500 will still be out-performing other architectural coatings. Attacks by the sun, weather and atmospheric pollutants will not take the sparkle away from this durable coating. KYNAR 500 based finishes resist pollution, ultra-violet degradation and mortar stain.

Finishes based on KYNAR 500 FVF, resist cracking, crazing and fading. Its excellent design flexibility and wide spectrum of colours permits architectural innovation.

When you specify KYNAR 500, you can be sure that the beauty of your design is protected far into the future. For more information on KYNAR 500® applications, write to Pennwalt Plastics Limited, Cherwell House, St. Clements, Oxford OX4 1BD, Great Britain, or call 0865-728 981. Telex: 837938 pp eur g.

KYNAR 500® is Pennwalt's registered trademark for its vinylidene fluoride resin (FVPF).



## Punishment block

from page 19

They suggested a private meeting with the TCPA. Our response emphasised that it is central to the whole TCPA philosophy that the community is fully involved at all stages of the planning process. We asked the authorities to state clearly if a meeting would be out of the question were Divis residents to be present, and we suggested that there would be little point in meeting at all if the future of the complex was beyond dispute.

The reply was ambiguous with the DoE agreeing that there was little point in meeting as "future policy on Divis is the responsibility of the Northern Ireland Housing Executive and it would be quite inappropriate to enter into discussions with third parties". However, they informed us that they had restarted talks with the Residents' Association. In this context it is worth quoting the words attributed to the chief executive, Victor Blease, in a recent news article. Blease has now dropped his insistence that the demolition of two more blocks must be linked to the acceptance of a major rehab scheme.

He states: "We will talk to the residents again without conditions being set, but we will talk to them here in Belfast, not at some political debate in London". This is a clear reference to the TCPA and they have made it plain that the only reason they wish to meet us (if at all) is to "correct some of the errors" in our policy statement; they do not seem interested in a tripartite meeting involving the residents and their ally, the Town & Country Planning Association.

But parallel with these negative developments, positive things are happening. The two blocks are to be demolished without conditions and, on an international level, Divis seems to be "on the agenda". In any press story on the much-publicised "Reagan aid package" for Northern Ireland, Divis seems to be the only issue mentioned by name. The *Irish Press* in February revealed that "Government representatives stressed the need for rehabilitating the notorious Divis Flats in Belfast".

A month later the *Guardian*

observed that "among the specific projects it had been suggested that US money could be used to build new Catholic housing to replace the Divis Flats, which are notorious for their poor condition and the social unrest they engender." (My italics).

If these reports have any substance it is quite clear that there has been a major shift of emphasis as regards the future of the complex.

The struggle of the Divis people is now strengthened by the intervention of the TCPA and the persuasive power of its exhibition. Yet still the authorities will not, officially, accept the inevitability of total demolition of this dreadful enclosure—the Northern Ireland Minister, Richard Needham, confirmed as much in the feeble replies he gave to a whole range of recent Parliamentary questions on Divis.

The cause of the Divis residents gains support everywhere we take the exhibition (some of the Divis people were recently bused by the Lord Mayor of Greenwich), but as small successes are achieved other problems arise. For example, the TCPA has publicly committed itself to the next crucial stage in the campaign — the drawing up of a community plan with the people, though how this will be done with the threatened collapse of the whole of the association's planning aid section is anybody's guess.

Because of its history, its location and its (assumed) associations, Divis has always been treated as a pariah, with its people fighting unbelievable odds to "assert their dignity". As one lady put it. To the TCPA Divis is 2,500 people existing in the most intolerable conditions we've seen in Europe; for that reason, if our principles and philosophies mean anything at all, we can't ignore it. If all the current breast-beating about "community architecture" has any depth, neither can anyone else.

The exhibition was created by TCPA Planning Aid Unit and staff, outside assistance Peter Maloney, Paul Fordyce, Lewis Walker, Alan Colley, Ronald Scott, and the London Hazards Centre. Storyline by Brian Adams design and layout by Anthony Mitchell.

## ETERNIT 2000 STREETS AHEAD



With a choice of attractive colours, a variety of shapes, textures and a full range of complementary accessories and ventilation products, Eternit 2000 Slates offer theSpecifier the chance to create roofs that are clearly streets ahead.

Eternit Building Products Ltd  
Sunderland, Co. Durham  
Hartley, S. Gosport  
Tel: 0904 581  
Tel: 0705 3 00421  
Telex: 817 727





Glass

# SHATTERED ILLUSIONS

Tim Ostler reports on the recent "Glass in the environment" conference, which attracted some of the world's leading practitioners.

"WHAT makes glass interesting," explained Gavin Stamp, "is the way it is broken up." His speech was interrupted by a violent crash as the sound of shattering glass came from the foyer next door.

Stamp was in the middle of his introduction to the much-trumpeted "Glass in the environment" conference at the Royal College of Art. It was one of the few workshops during a well-organised and intensive event put together by the Crafts Council and the RCA. Stamp began his talk by saying that glass is "a vast subject, impos-

sible to cover"; and after three days densely packed with lectures and discussions, I felt like echoing him about the whole conference.

"Glass is all about illusion", said Terry Farrell at one point, perhaps referring to the use of mirrors for reflections. But reflectivity is a property not of glass itself, but of its metallic coating. Are the illusions chiefly in the buildings — or in the minds of architects?

For artists, glass possesses a character that is rich, varied and sensitive. Architects, conditioned by a century or more of idolisation of the Crystal Palace, see it primarily in sheet form,

invariably in combination with steel or aluminium. Glass offers architects the promise of escaping from limitations of gravity, privacy and enclosure. Late-modernist architects in particular admire it for its neutrality — perhaps because it suggests a certain sympathy with the idea of a building conceived as a diagram of function.

IM Pei's Michael D Flynn, as architect of the notorious John Hancock Tower (of the tumbling glass panels), was perhaps a witty choice as speaker. He observed that glass' appeal for architects lies in its qualities of absence; and several of the speakers went into some detail on the matter of how to maximise its invisibility. It was hard to believe that the wild-haired Flynn, looking like a rather less tortured version of Leon Krier, was the author of several of Pei's most earth-shatteringly banal glass blocks. He is also responsible for the design of glazing for the controversial glass pyramid being built in the Louvre's courtyard.

In view of the sensitivity of the site, Flynn searched for the most optically clear, water-like glass he could find. Eventually he found one — a drawn variety. Gunnor Birkett, architect of the Corning Museum of Glass, claimed that "when we talk about high technology, we talk about minimalism"; and there's no doubt that form-makers don't come much more minimalist than Pei. It remains to be seen, however, whether this pyramid will, as Flynn hopes, disappear and be read as a trellis rather than as a distracting reflective architectural object.

The appeal of transparency for architects was touched upon during an engaging talk by Derek Sugden, of Arup Associates. After slipping somewhat inconsequentially through a series of slides, Sugden produced the dazzling insight that glass curtain walls possess "the erotic attraction of a transparent plastic mac". Whether this was intended as a compliment or not is unclear.

Martin Francis, designer of the suspended glass wall on Fosters' Willis Faber Dumas building, provided an impressive display of the technocrat's art. Originally a yacht designer, Francis explained how, using a tensile structure to resist wind loads, he had designed a glass skin for Paris' new French National Museum of Science & Technology which is intended to be even more transparent than a suspended glass assembly (he was at pains to disclaim responsibility for the architecture that surrounded it).

The centrepiece of the event was the screening of John Tchelenko's film "Wall of Light" featuring Richard Rogers and Richard Deacon. But, so far from serving as an example of collaboration between artist and architect, this act of homage to Pierre Chareau's Maison de Verre served primarily to demonstrate the wholly different responses of two people of different disciplines to the same artistic phenomenon.

The appeal to architects of Chareau's "wall of light" is significant, as time and again at the conference members of the profession spoke of "the quality

of light" produced by large areas of glass. Glass in this context is primarily a mean to an end. What the Maison de Verre offers architects — like the Crystal Palace — is the vision of a heavenly form of architecture, whose very fabric appears to glow with celestial light. Frosted glass has the additional advantage of accentuating the illusion, because the source of the light is not apparent.

Of course, this almost mystical view of glass is nothing new. As Birkett reminded us, glass has always been an object of fascination — hence the occurrence of glass palaces or slippers in fables — not to mention the use of stained glass in religious architecture. When first developed, glass must have been an exotic material indeed. Stamp and Mox Fordham differed as to whether the Romans used it to glaze windows. But if they did, it must have seemed a tremendous extravagance — rather like casting snail weights out of gold.

But, as John Young demonstrated in his presentation of the Lloyd's building, a few architects are still devoting the care of a jeweller to details. The walls of this building were the cause of a much-celebrated search for glass of the requisite degree of sparkle; and when Birkett described the "velvety" form of glass (textured and backed with stainless steel) with which he clad his Corning Museum of Glass, I noticed John Young listening intently.

Another of Rogers' partners, Michael Davies, was among those who contributed to a presentation of developments in glass we can expect in the near future. He offered a vision of future self-monitoring buildings glazed with materials that are totally responsive to local conditions. But, undoubtedly though Young's achievement, it appeared to me that his team had spent so many months with their noses pressed up against the sparkle glass that they lost sight of the big picture. That atrium, for instance, seems more like an oppressive void filled with lightwell than an uplifting zone of light.

Thanks to the claimed inspiration from la Maison de Verre, the Lloyd's building acted as a kind of central "text" for the conference. But by the end of the second day several artists confessed to getting more than a little tired of references to the building, for all its "optically-designed pimples", seemed to produce little excitement among the audience, the vast majority of whom were

glass artists.

This was especially so when viewed in comparison with, for instance, artist Ed Carpenter's rather more stimulating work, which seems not only to refract light rather more sensitively than Rogers' glorified "toilet windows", but also to demonstrate a parallel concern with what can be seen through the glass. His recently completed work for the Justice Building in Portland, Oregon, happens to tie on the axis of Michael Graves' famous monument. But its colour is restrained so as not to compete with the rich greens of the trees immediately outside.

Conference organiser Martin Hunt, late of the RCA, was critical of both artists and architects. "Recognising colour, unlike patterns," he explained, "requires no learning." No other material, he pointed out, delivers colour in such a potent form as stained glass; but "architects have bred colour out of their system, while stained glass artists wallow in it".

Glass artists, he said, were "technically driven". The implication was that this brought the danger that they might lose themselves in the exploration of glass' technical potential.

Thankfully, the prevailing architectural climate has at least made it acceptable for architects to admit to aesthetic rather than functional reasons for their designs; and, while matters of function were explained almost to contradict this view. But most of the architects on display demonstrated glass' aesthetic appeal as an end in itself rather than a craft-oriented material.

Equally, because its function is visual, glass offers a link between function and visual art. But although both artists and architects spoke lyrically of the qualities they valued most in glass, no clear view emerged of the way in which their different enthusiasms could be harnessed to each other.

Anne Warff, an artist from Sweden, was one of those who spoke on the third day. Working in a country which enjoys a percentage for art for public buildings, she was under no illusions about collaboration with architects. She explained that in her own experience, "in no case was I able to identify with the architecture". But, she countered, "for me individual statements live their own lives and can be guests in architecture, as architecture is also guest on this Earth."

In what several artists believed to be the highlight of the conference, Joachim Poensgen

Glass

uttered a plea for a sense of occasion in the creation of works of stained glass for architecture. "We must make appropriate glass," he said.

Brian Clarke delivered the final speech before the sunning up. In a speech evidently intended to be deliberately provocative, he struck various postures in his condemnation of all that did not constitute "great art". Describing the consecutive ambitions with which he had been seized at different stages in his upbringing, his combination of hubris and superficiality lent his talk the glib rhetoric of a politician. The widespread grunts of agreement which greeted Clarke's sneers at "community art" gave some grounds for the suspicion that there may

be as much division between glass artists and muralists as between architects and artists as a whole. Despite his confession at the start that he was "still considerably pissed", he was loudly applauded for his effort.

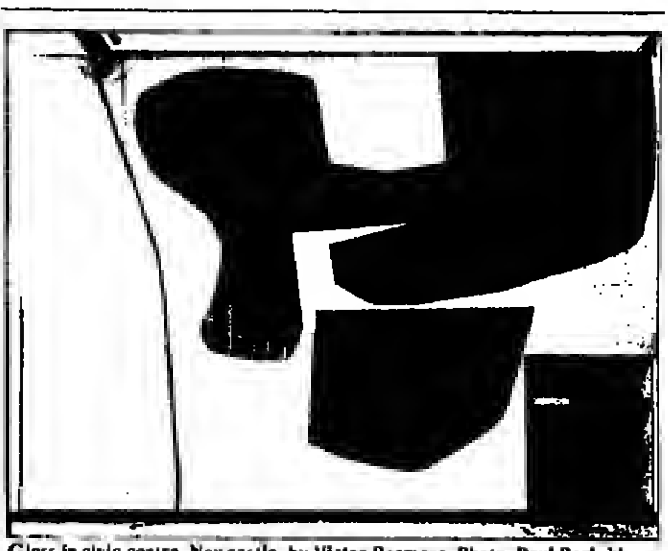
The conference ended on a moderately high note, but without clearly defined resolutions. I got the impression that most delegates were too shell-shocked to be able to come to any definite conclusions. The first two days had been dominated by speakers from the architectural world; yet the list of delegates testified to an overwhelming preponderance of artists. In a cursory examination, I counted something like 17 architects. The decision to double the registration fee for

architects to a hefty £160 might account for this.

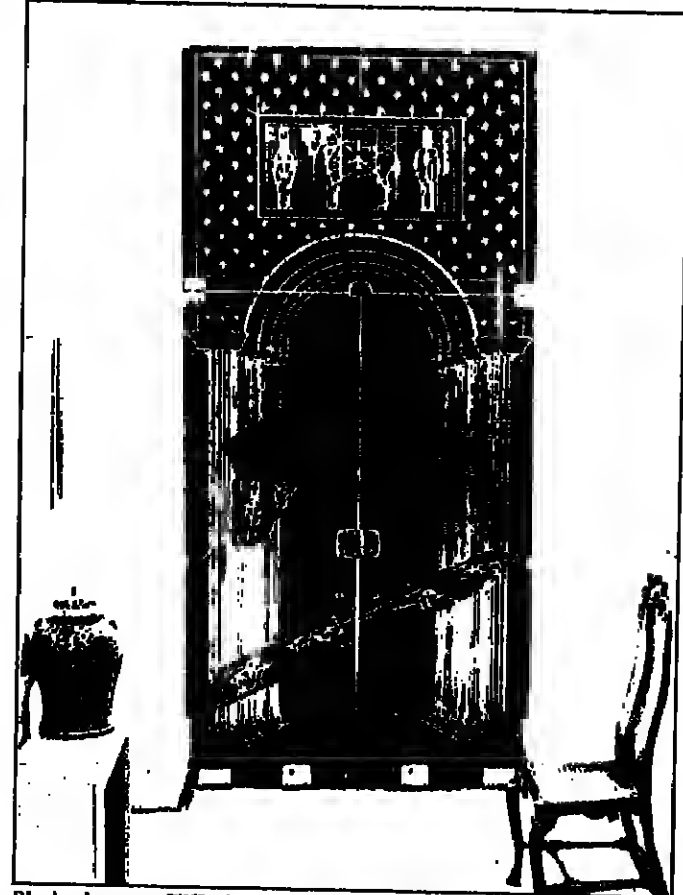
The conference was in fact the latest in an international series, and boasted an impressive number of foreign visitors. But by the third day, most of those I spoke to were reeling from all the architecture. "We haven't had enough opportunity to show each other our work," said one.

Instead, something like 250 glass artists from around Europe were treated to a state-of-the-art presentation by some of the world's leading practitioners in the use of glass in architecture. I only hope they appreciated it.

The "Light Values" exhibition continues at the Crafts Council until May 25. Details: 01-930 4811.



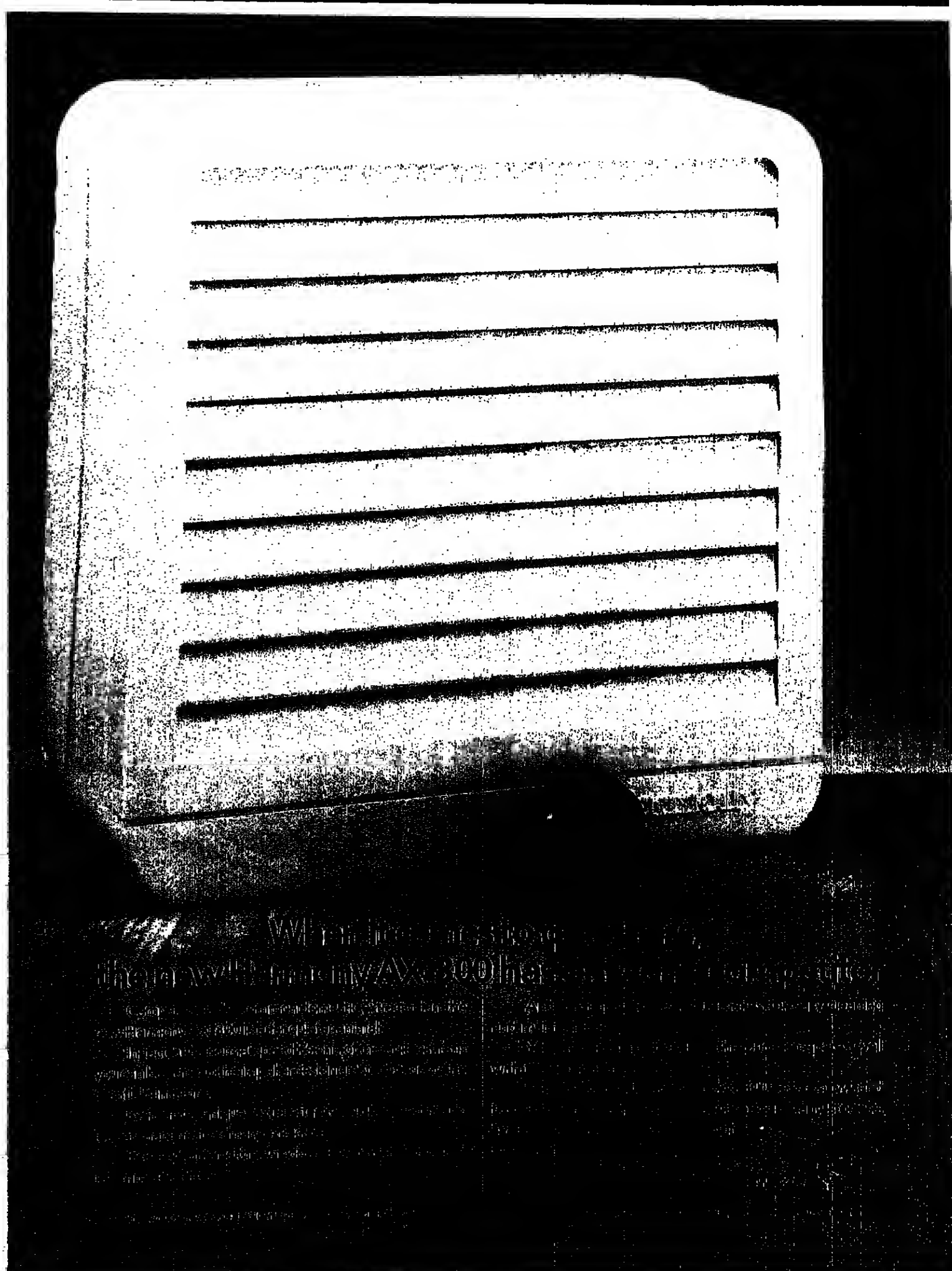
Glass in civic centre, Newcastle, by Victor Pasmore. Photo: Paul Barkshire.



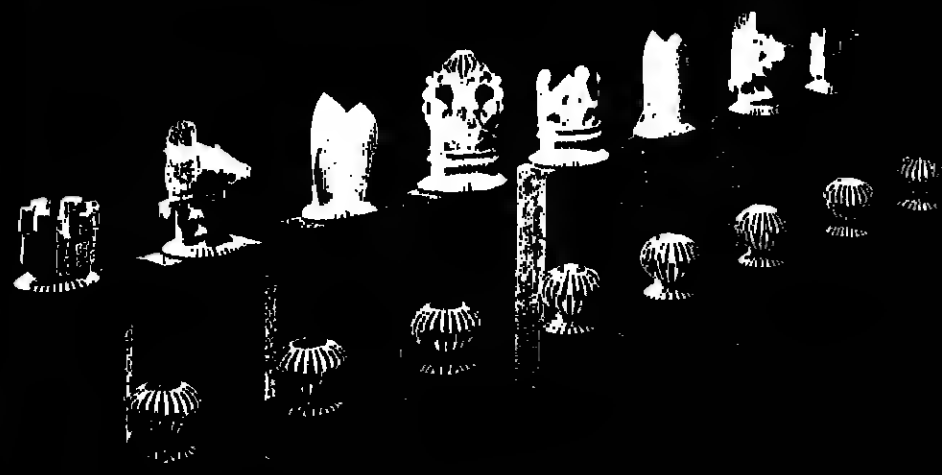
Rhodca doorway, Clifford Ratney & Andrew Cooper. Photo: David Bradford.



Willis Faber Dumas building, Foster Associates. Photo: John Donat.



## MASTER PIECES



EDENHALL

Architectural Masonry, Bricks and Pavers.

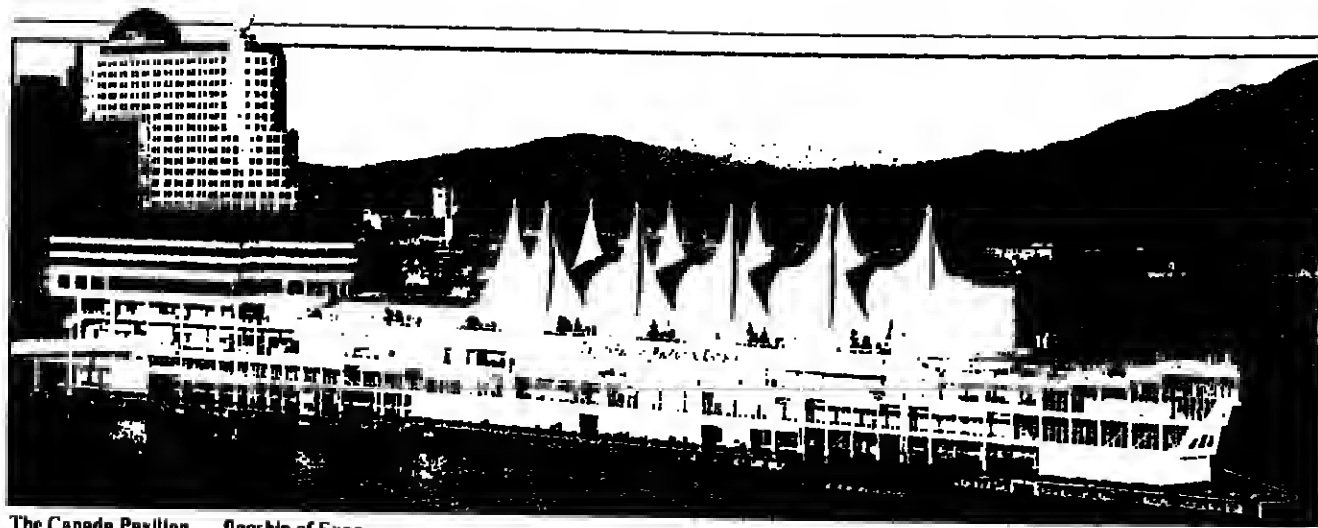
Head Office:  
Burlary Plains, Edenhall, Pembrokeshire, Gwent, CA11 8SP  
(Tel: 01493 65111)



E86

# CANADIAN CLUB

Michael O'Toole reports on the 1986 World Exposition which opened in Vancouver last week and continues on October 13.



The Canada Pavilion... flagship of Expo.

EXPO 86

EXPO 86 has enjoyed the highest advance ticket sales of any world's fair. It looks impressive; it feels efficient.

It is also a billion dollars worth of construction — 62 pavilions, 12 plazas, 100 food and merchandising buildings, five theatres, four gates, five megalithic amusement rides, and five public transport systems built on two prime locations in downtown Vancouver. The main 50ha site lies along 2.7 miles of the city's False Creek waterfront, connecting by Skytrain to the nearby Canada Place complex, Expo's piece de resistance.

This special category world's fair (not a trade fair), with its themes of Transport and Communications, opened its gates on May 21 to the first of more than 17 million visitors expected in the six months. Traditionally, world's fairs, with the opportunities they bring for outrageous and innovative designs, have provided major platforms for architectural debate. And Vancouver's offering, the 85th fair since the Great Exhibition (Crystal Palace) in 1851, should not disappoint us on that score at least.

For the past three years Expo has carried the British Columbian construction industry and pooled the design talents of one of North America's most beautiful cities. But a hard-nosed, seven-year commercial preparation, boasting more corporate finance than the Los Angeles Olympics, does not come off without casualties. For many eminent figures in Vancouver's cosmopolitan architectural community, Expo has proved more the battlefield than the fairground.



One of the seven monorail stations.

The sheer volume of work and diversity of creative influences have led to some serious conflicts. The issue, it seems, is not so much design style as design per se, and its suitable role in a mini-metropolis which will disappear after only six months. In the oft-quoted words of former Expo 86 president Mike Bartlett (of Wonderland fame): "At a world's fair you gotta do it or not do it. Then they'll be happy."

Philosophical differences aside, the site has emerged on time, roughly on budget, and with a better than average chance of doing credit to its Pacific host (15 out of the last 18 Expos have suffered considerable financial loss). And with tough management led by multi-millionaire Jim Pattison, Expo 86 has so far remained free of the embezzlement scandals which plagued Canada's last exposition, in Montreal in 1967.

The linear format, served by a central 30 metre-wide concourse, is divided into six colour-coded zones. Apart from theme plazas there are no thematic demarcations, but across the board four principal architectural categories can be identified:

- The core of official Expo structures — theatres, amusement rides, food and merchandising buildings, first aid centres and theme pavilions.

- The showpiece "legacy" buildings.

- The international exhibition pavilions — multi-configuration modules which serve the 52 foreign participants (some of the smaller nations share).

- The seven corporate and nine Canadian provincial pavilions (all commissioned privately by the bodies concerned).

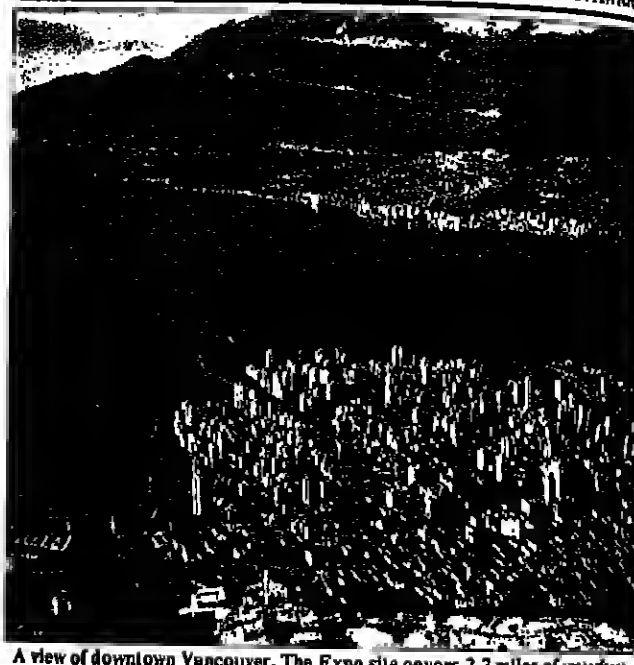
Of the four, by sheer weight of numbers, it is the ubiquitous modules which dominate the site, their angular exo-skeletons giving Expo 86 the "look" for which it will be remembered. Conceived by the fair's original

chief architect, Bruno Freschi, and modified by structural engineer Bogue Babicki, the modular system is designed simply to provide a flexible pavilion shell to the international participants (an International Bureau of Expositions requirement). Individual nations, which lease modules by the unit according to their needs, can then bring in their own designers to create distinctive pavilions.

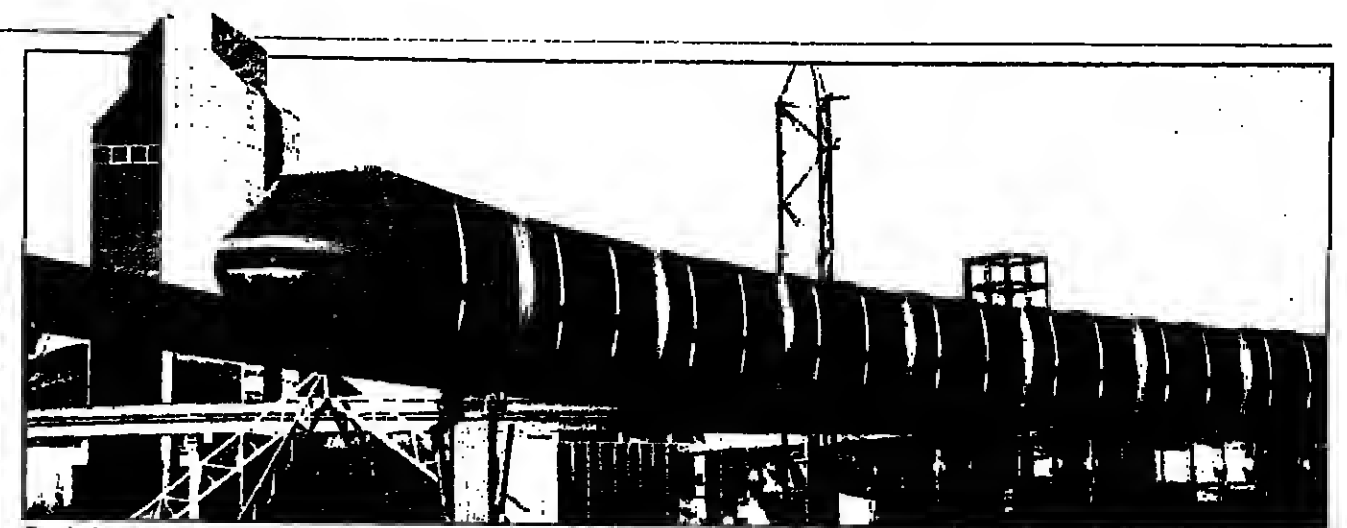
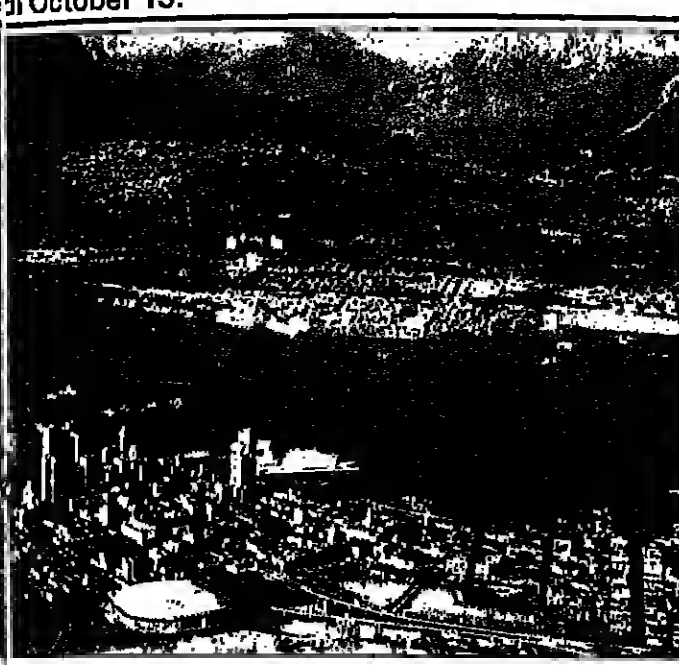
The system comprises four basic parts — concrete foundations, tubular steel frame, wood

roof panels and wood wall panels. The frames are arranged in a two-directional double grid of 15m and 3m to form pavilions. Up to nine modules can be blocked together column free. Larger buildings (up to 16 units) require one central column cluster. Columns are made from Parallam, one of the strongest available wood-based building materials — composed of long wood fibres and a waterproof adhesive.

Maximum interior clear height is 7.2m (13.2m with the roof in the sloped configura-



A view of downtown Vancouver. The Expo site covers 2.7 miles of waterfront.



Expo's sleek monorail.

tion). Total interior space ranges from 250sq m for a single module to 4,500sq m for a 16-module cluster. The largest configuration which has actually been hired is 12 (USSR). Britain and the USA both use six.

Of greater long-term impact, though, are Expo's four "legacy" buildings, the only structures which will survive the six-month fair. Grandest of these is the striking Canada Pavilion, the largest pavilion built for a world's fair.

Incorporated into the 3ha

\$300 million Canada Place complex just under a mile from the main site, the pavilion forms the wind-blown sails of a multi-faceted design representing a giant ocean liner.

The effect is created by Teflon-coated glass-fibre fabric, stretched on a network of steel cables and anchored on 10 27.8m steel masts. The pavilion was designed by Toronto-based architect Eberhard Zeidler (also involved in the Ontario Pavilion), using roof fabric produced by Birdair Structures Incorporated of New York. After

Expo the pavilion will be refitted as a trade and convention centre.

The other legacy buildings all lie on the main False Creek site. First to appear in its full glory was Expo Centre, the principal symbol of Expo, which opened for public preview from May-October 1985. This 17-storey building with a 40m diameter geodesic dome was, like the modular system, carried off by the Bruno Freschi/Bogue Babicki combination. It features a 500-seat Omnimax film theatre, with the largest screen of its kind in the world, and has total interior space of 7,695sq m. Located at the east end of the creek, this \$20 million showpiece is built over water on piling and decking. The dome contains 240 stainless steel panels and 130 strobe lights.

Another showpiece, towards the west end of the site, is the Roundhouse, an historic 19th century locomotive service facility which has been transformed into a theme pavilion addressing "The Golden Age of Ingenuity" (one of the exhibits is Stevenson's Rocket). Structural adaptation of the building was designed by Norman Hotsen Architects of Vancouver. Interior refurbishment and exhibit design fell to the Czechoslovakian outfit Studio Shape, with spectacular multimedia results. The concepts include gigantic projections of vehicular mechanisms, including a combustion engine which contains a film theatre for 150 standing viewers.

But the most elaborate building on the main site, appropriately, is the host British Columbia Pavilion; part of the three-building, 4ha BC Place Complex. This prestigious architectural commission was won by the Vancouver-based Walsman Dewar Groulx Carter partnership, which, with five major commissions, has been one of Expo's foremost creative influences.

The main pavilion building, Discovery BC, is a 30m high glass gallery containing 5,000sq m of exhibit space, a 500-seat Showscan theatre, and a 250-seat restaurant. The structure is a latticed steel truss framed to fifty 60cm diameter columns (pre-built by Canron Inc). The building contains 30,000sq m of aquamarine glass and 500 tonnes of tubular steel. The three main exhibit areas include four "Discovery Trees", cylindrical towers ranging to 18m tall containing elevators to take visitors vertically past a series of special exhibits.

The two adjacent buildings, Challenge BC and Showcase BC, principally of functional, administrative use, provide another 3,600sq m of exhibit space, a triple screen film theatre and a business conference and information centre.

Many state of the art passive systems are employed in the complex, controlled by a Delta 5200 computer. These include security (fire alarms, open fire door alert, eard access, closed-circuit surveillance), lighting and heating/cooling. Heat-activated blinds, operated by solar sensors linked to the computer, are installed in the upper portions of the main glass pavilion.

In the centre of the complex is the Plaza of Nations, used for major ceremonial occasions during Expo.

It holds 10,000 and is covered at a height of 21m by a huge space frame canopy containing 21,000sq m of aquamarine glass and 4,500 struts.

The \$54 million BC Place Complex is seen as a major factor in the long-term redevelopment of the area, providing an entertainment and office focus. Proposals for the future use of the BC Pavilion include a new science and technology centre.

Walsman Dewar Groulx Carter also designed the second of Expo's two theme pavilions, Ramesses II, which houses an 80-piece collection of 18th dynasty Egyptian treasures. Anomalous to the fair's focus of transport

continued page 28

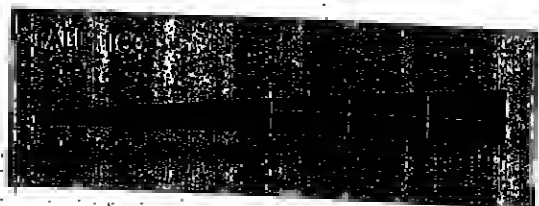
## GET THE WATER OFF THE ROOF!



A UNIQUE FAMILY OF PROBLEM SOLVERS FOR PONDED ROOFS AND GUTTERS!

### KORKTAPER

Korktaper is a precisely tapered insulation system that produces positive drainage when used on either new construction or re-roof. Korktaper is suitable for both B.U.R. and Mastic Asphalt.



### KORKTAPER POINT .35 & POINT .6

High insulation with minimum thickness by using cork/urethane interlocked composite boards at the low point of the system. Minimum thickness of insulation means minimum alterations to detail.



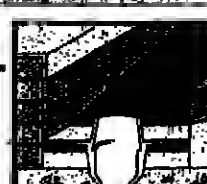
### KORKDRAIN

The positive economic solution to localized ponding problems. Korkdrain can be designed into new construction or applied to ponded areas on existing roofs.



### KORKGUTTER

A low cost product specifically designed to remove ponding from box gutters. Available in two standard falls 1:80 and 1:100.



COMPLETE FREE SERVICE FOR INSULATION AND DRAINAGE FROM ROOF INSPECTION TO WORKING DRAWINGS

### Euroroof Ltd

Denton Drive, Northwich, Cheshire CW9 7LU  
Telephone: 0606 48222. Telex: 688205



Creative director Ron Woodall took a year to understand what was going on.

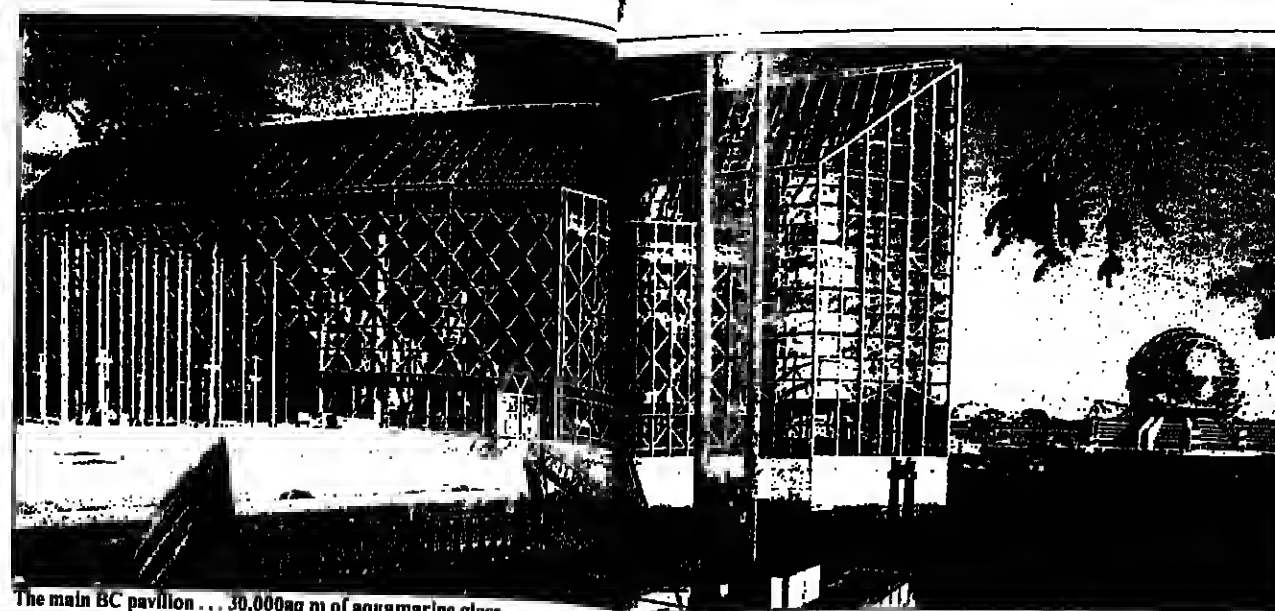




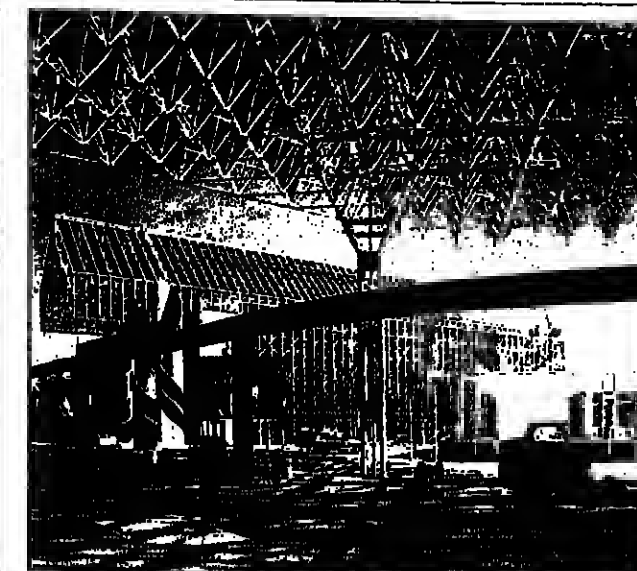
The monorail and the Saskatchewan Pavilion.



The central concourse.



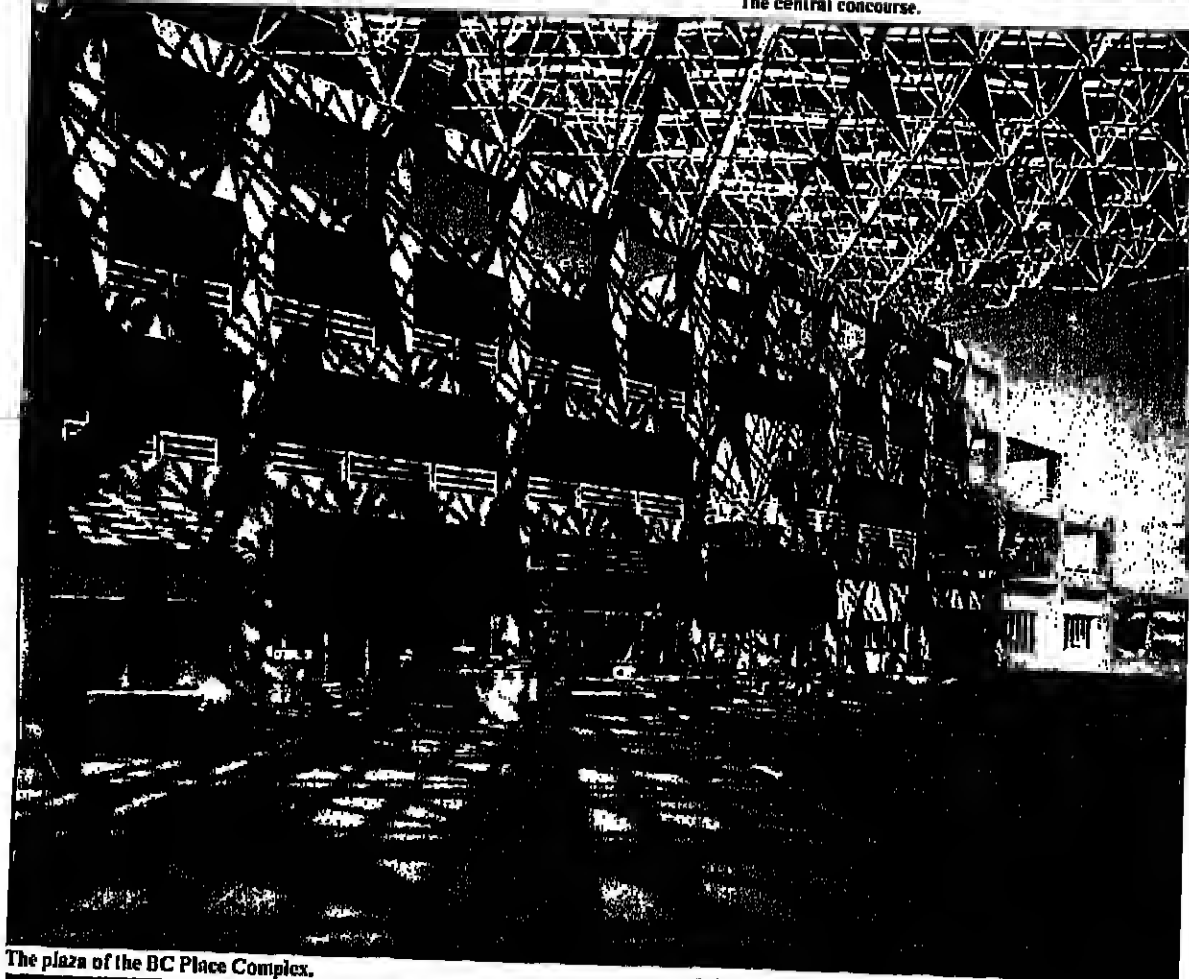
The main BC pavilion... 30,000sq m of aquamarine glass.



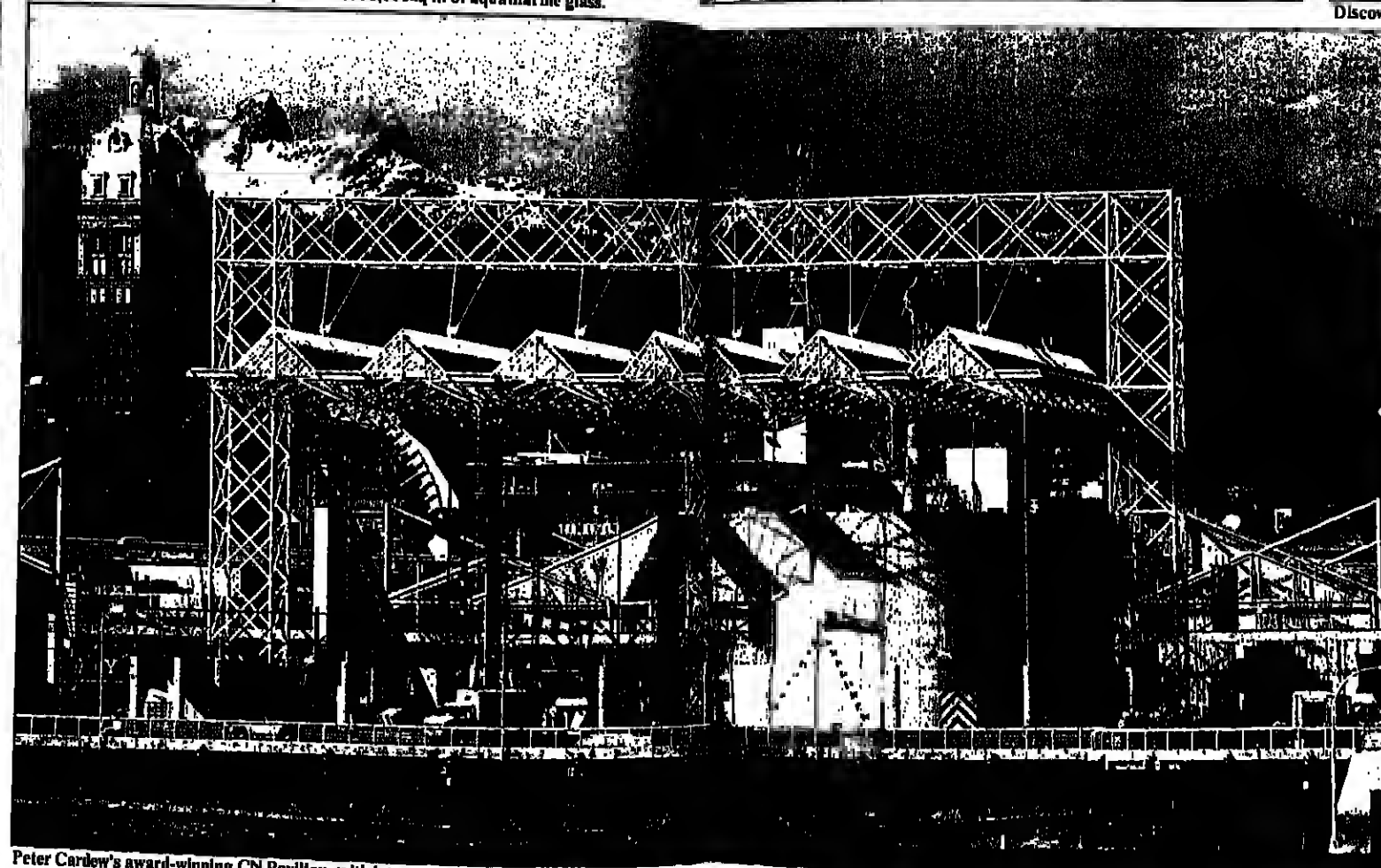
Discovery BC in relation to the Plaza of Nations.



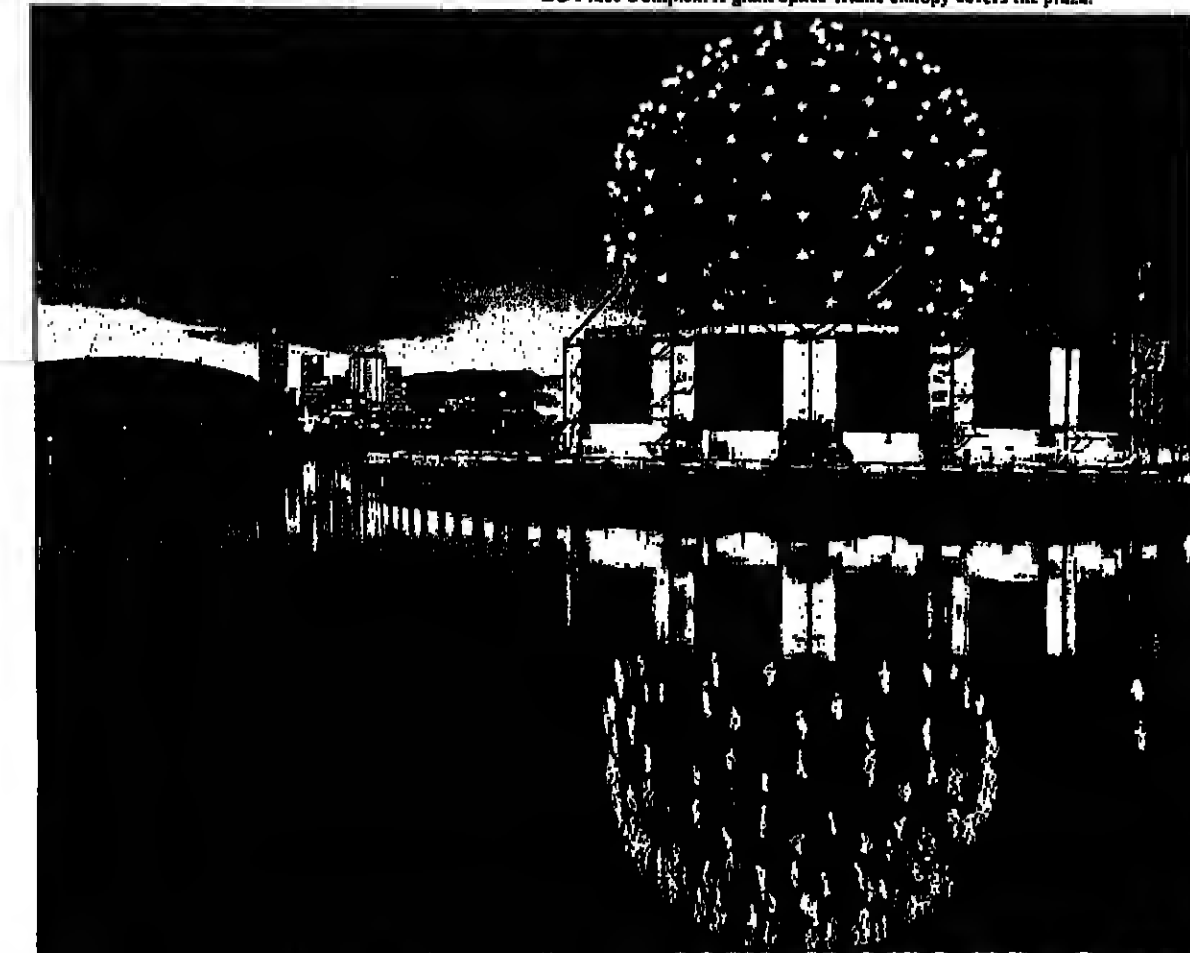
BC Place Complex. A giant space-frame canopy covers the plaza.



The plaza of the BC Place Complex.



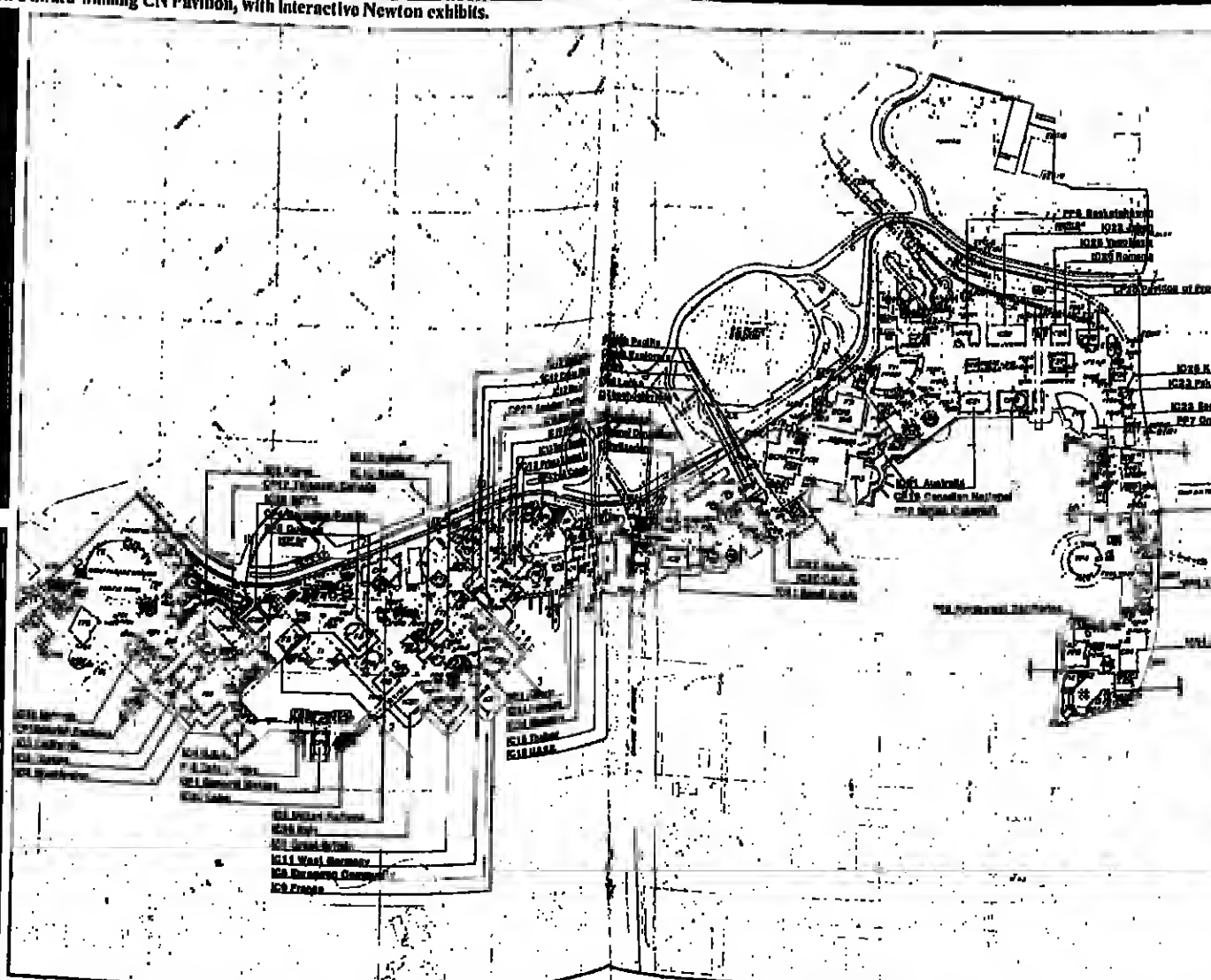
Peter Cardew's award-winning CN Pavilion, with interactive Newton exhibits.



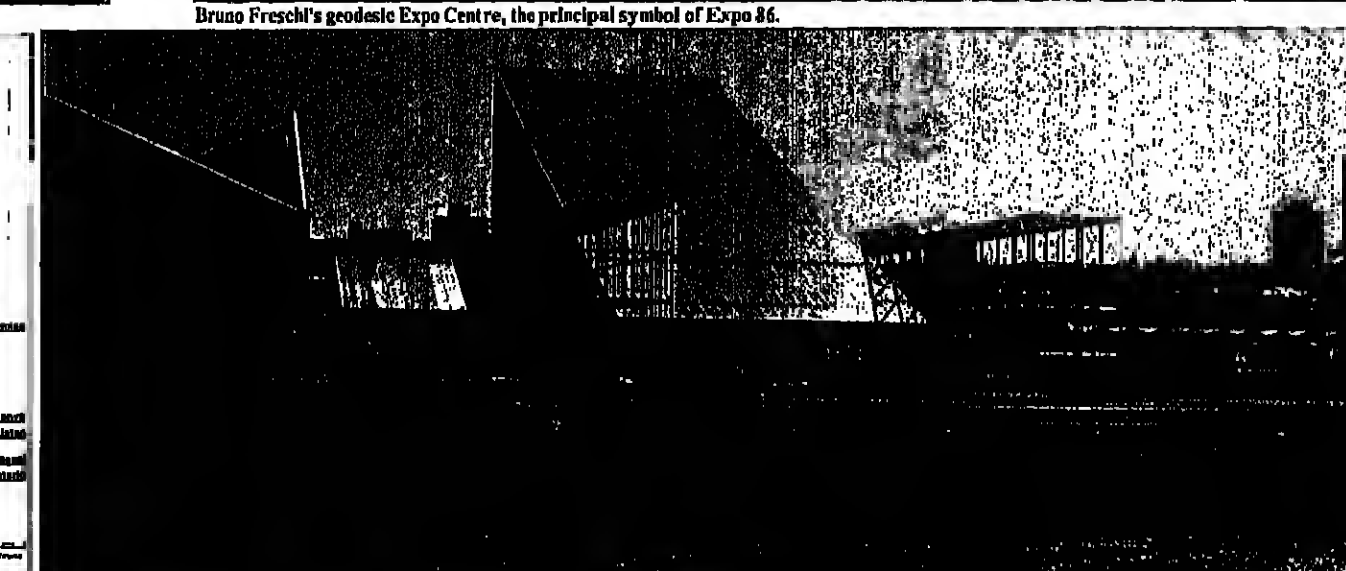
Bruno Freschi's geodesic Expo Centre, the principal symbol of Expo 86.



Highway 86, a piece of zany road sculpture designed by Site Projects of New York.



## The Expo site plan



The General Motors white metal-clad "motion wedge".

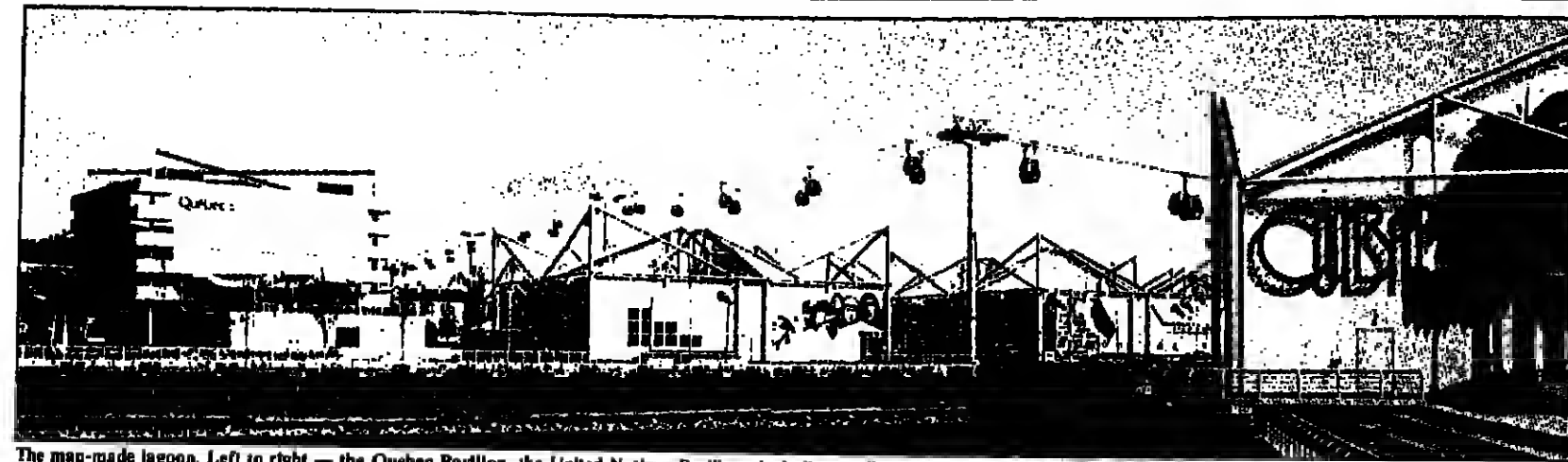


The wedge is suspended from a double truss frame.

The Ramesses II Pavilion which houses a collection of Egyptian art treasures. Designed to represent a half-excavated temple.

مركز المعرض





The man-made lagoon. Left to right — the Quebec Pavilion, the United Nations Pavilion, the Italian Pavilion, the Cuba Pavilion. The Air Canada gondola runs overhead.

from page 25  
and communications, this is also the most eye-catching pavilion on the site. It was inspired by the famous Abu Simbel temple in southern Egypt (the greatest architectural achievement of Ramses II's era) and aims for the half-excavated look. The \$2.2 million building and its decorative pillars are constructed of isogen mesh-covered plywood, giving the impression of sandstone.

WDGC's three remaining commissions were for corporate clients, who have enjoyed design carte blanche, restricted only by

zoning and safety regulations. Canadian Pacific, Canada's largest private company, celebrates its centennial with one of the costliest temporary pavilions, an imposing "black box" design incorporating two large theatres and a lounge for first class CP passengers. McDonalds Canada, with several conventional restaurants on the site, has also commissioned a \$2.6 million floating restaurant — "Macbarge".

And General Motors Canada offers us a quirky white metal-clad "motion wedge" at the west end of Expo's man-made lagoon.

The structure is suspended on a double tubular truss frame with a single pin connection every 2.5 metres. Visitors queue inside one arm of the frame into a 150-seat theatre, then pulse out through the other.

Across the rest of the site dozens of other structures cry out for attention: the blue iceberg Northwest Territories Pavilion; the waterside amphitheatre of the Ontario Pavilion; the 4,300-seat Expo Theatre with its dramatic heavy timber roof spanning 100m; and the delightfully demented Highway 86, a mammoth sculpture which

runs the whole width of the narrow site, designed by Site Projects Incorporated of New York.

With so much design activity it is perhaps surprising that only one building has been honoured with a major architectural award. English born architect Peter Cardew won the 1985 Canadian Architect's Award of Excellence for his imaginative CN (Canadian National Railways) Pavilion. A "no walls" tension canopy structure with three-point gantry suspension, this \$1.8 million pavilion is designed to be reminiscent of the

great 19th century railway terminals, while blending structure, theme and display for exposition purposes.

The main section of the pavilion, which can be seen from all around the Expo site and entered from any direction, is made up of four 10-metre high exhibits which demonstrate Newton's four laws of motion — uniform, circular, accelerating and oscillatory. Visitors activate the giant exhibits, playground tough screens for further information on the laws of motion.

The other part of the pavilion is an enclosed cylinder containing a multi-media auditorium. In designing this, Cardew has paid particular heed to keeping visitors entertained while waiting for the next show. Rather than a preshow anteroom, he has opted for a raised open-air ramp which gives the queuing public an excellent view of the interactive exhibits, the rest of the Expo site, and Vancouver's picturesque backdrop.

Modest on his own achievements and eager for his adoptive city's exposition to succeed, Cardew is nevertheless disappointed with the fair's lack of visual daring. "The failure is

really on the part of British Columbian architects rather than the Expo Corporation. At the same time, too much dependence is placed on the internationals to do something exciting with their pavilions. And the legacy aspect is a tragedy. There's a billion dollars worth of construction out there; all but a fraction of it is going to be scrapped."

Fair comments, but then designing Expo is not the rational exercise one might expect. For those at the helm it's been a nerve-wracking process, the terms of reference continually changing. When ideas

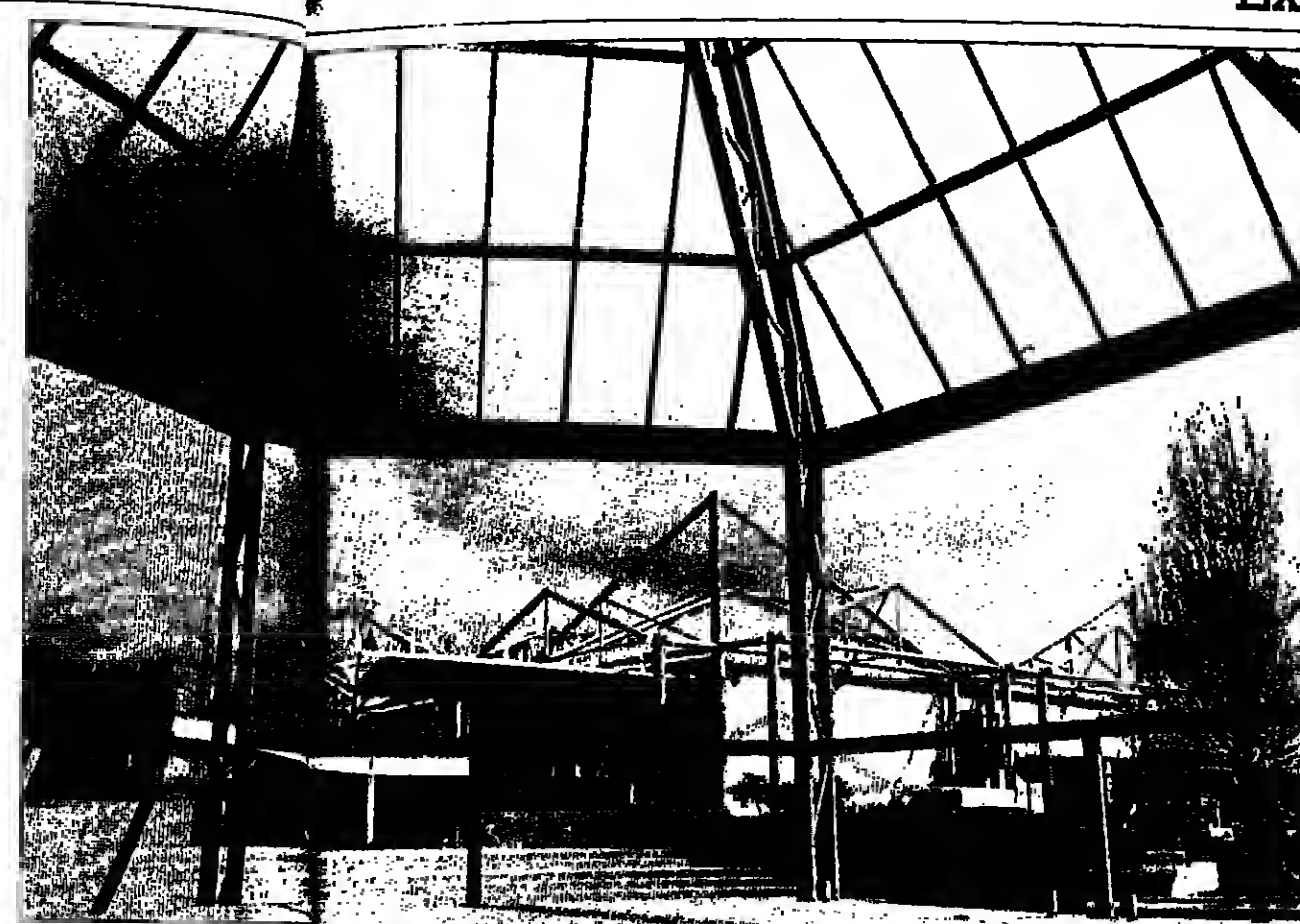
were first mooted in 1978, the event, to be called Transpo, was seen as a modest-scale Pacific Rim trade fair which would complement Vancouver's centennial celebrations. Since then it has grown into a fully-fledged exposition involving 54 nations (Britain was the first to sign up in 1981). Additions to the roster, of states, provinces and corporations as well as nations, have occurred in dribs and drabs, the most recent being Malaysia last February.

Given such progressive expansion, all plans were at best theoretical until the site actually began to take shape. Also

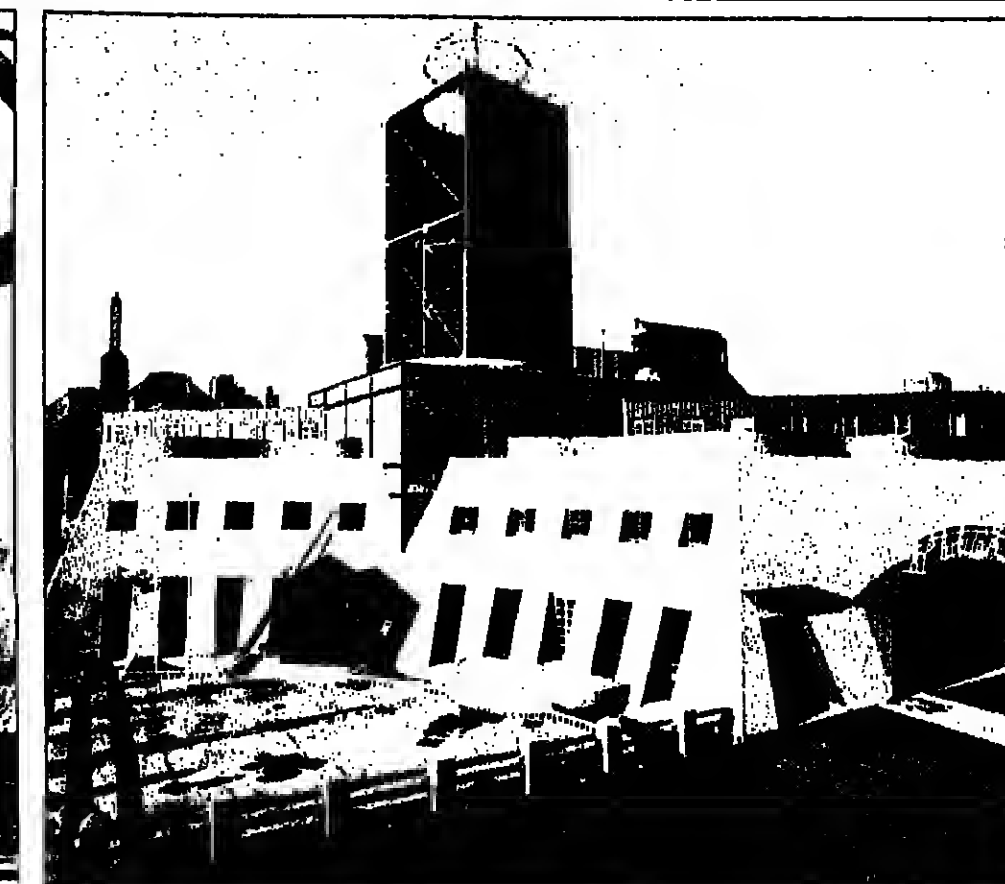
significant to the look of the fair is that no one person designed it, and no one person has had control over the wide architectural input. In the view of Expo's creative director, Ron Woodall, the race to May 2 was a relentless relay, the design baton being passed from hand to hand with little regard for individual sensibilities.

That baton found its first bearer in 1981 with the appointment of Bruno Zevi (a veteran of Expos 67 & 80) as chief architect. He was charged with creating a master plan for the whole fair and developing an

continued page 30



The European Plaza.



The Alberta Pavilion.

## CHARACTER BUILDING

### COUNTRY WOOD SERIES

Look at it this way. You can now add a new dimension to any building — the dimension of character — thanks to the Country Wood Series of five new bark-textured facing bricks. Distinctly traditional, they cover five subtle shades embracing rich reds, mellows, yellows and natural buff. Don't forget the names: Clayton Red Multi, Autumn Russet, and Longmile Stone. Now you can build with character and confidence. Country Wood from London Brick — Character Building.

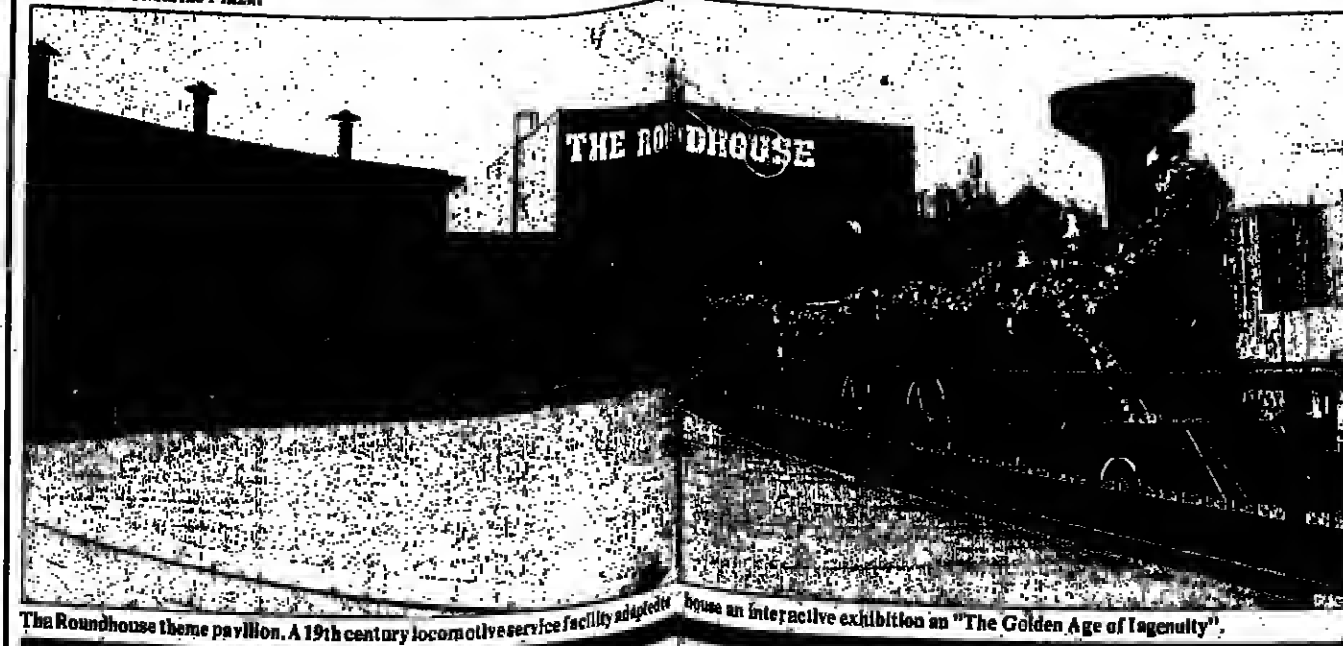
**COUNTRY WOOD**



CHARACTER BUILDING



Section from Marine Plaza.



The Roundhouse theme pavilion. A 19th century locomotive service facility adapted to house an interactive exhibition on "The Golden Age of Ingenuity".

## WHEN SPECIFYING SMOKE AND FIRE BARRIERS THERE'S MORE AT STAKE THAN PEACE OF MIND.

There's nothing more deadly or destructive than an unconfined fire. The latest annual statistics make uncomfortable reading — 900 lives lost and over £550,000,000 worth of damage caused by fire\*. The human cost is incalculable.

That's why it's so important to specify smoke and fire barriers you can rely on whatever the conditions.

Pilkington Insulation's new Rocksil Smoke and Fire Barrier has passed the most intensive test programme in the industry. For its combination of reassuring protection and ease of installation, there's no better barrier on the market.

It's the latest addition to the Pilkington Insulation range of Fibreglass and Rocksil smoke and fire barriers. Small cavities or large, in domestic, commercial or industrial premises, Pilkington has a product for every application.

\*The latest figures for fire in Great Britain issued by the Fire Prevention Association.

To find out more, contact us at the following address: Pilkington Insulation Limited, P.O. Box 10, St. Helens, Merseyside WA10 3NS. Tel: St. Helens (0744) 24022. Telex: 628230 PILSTH G.



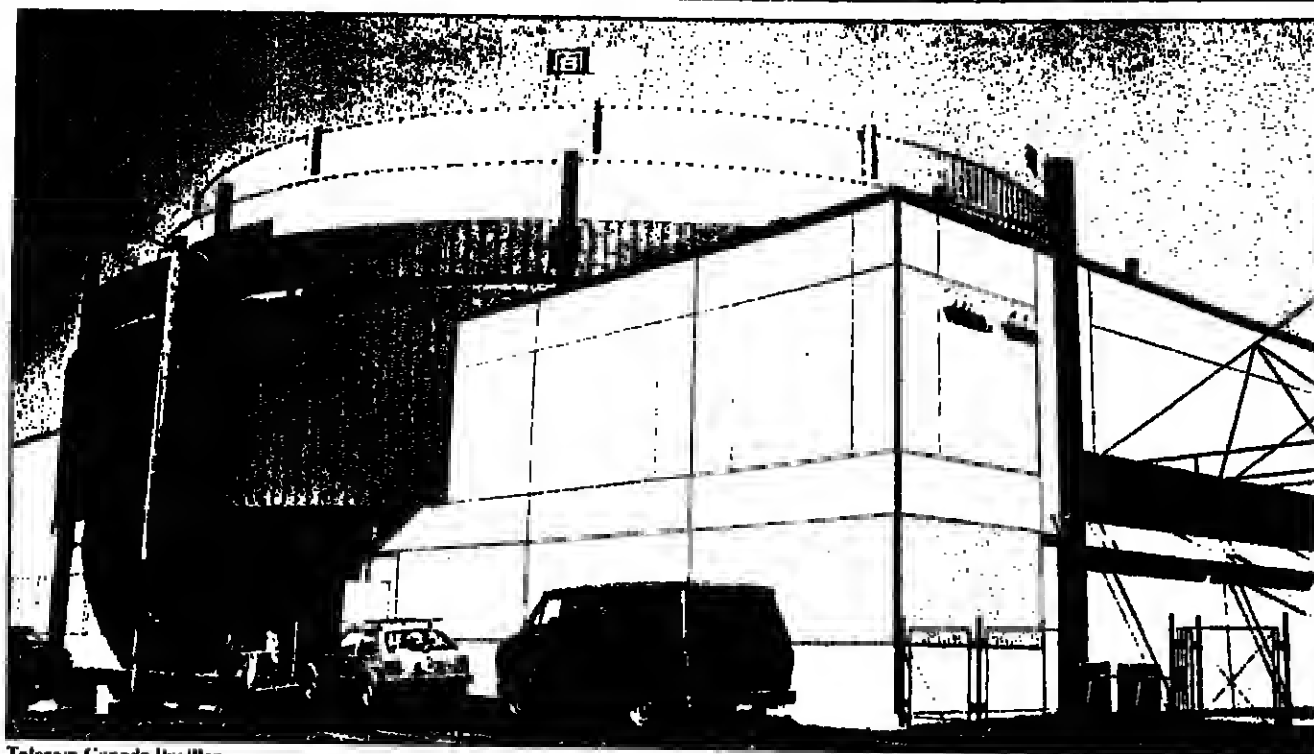
**PILKINGTON**

« Insulation »

ONE NAME SAYS IT ALL

Enter 27 ON EXPRESS





Telecom Canada Pavilion.

## The fluorescent that brings a new dimension to lighting design.

from page 29

exhibition module for the international participants. Lacking in firm criteria, Freschi's first plan was a test. No budget has been established, nor was the scale evident. Part of his job, therefore, was assessment — how many participants should be catered for? What cost? What size site?

The master plan, two years in the making, proposed an elaborate, design-orientated fair based on large galleries and interconnecting pavilions. The plan was then reviewed by a high-level international panel. Although many fundamentals of shape and layout survived the ensuing improvisatory processes of planning and execution, as well as certain specific items, in large measure Bruno Freschi's vision became "the fair that never was". The management changes at the end of 1982 had brought in an expeditious team with little time for "Bruno's idealism".

Feeling increasingly undermined in his capacity as chief architect, Freschi was eased away from the action as important decision making fell to others: installations Bob Smith; landscape architect Dick Strong; theme park wizard Richard Battaglia, a Californian with Disney experience.

Battaglia had a key role in assessing resource requirements — the numbers and distribution of washrooms; kitchen space/

public space ratios in the restaurants and such like. His work resulted in the preliminary footprints for the core of official Expo structures, including the food and merchandising buildings. In the event, these footprints were to be the only design guidelines issued to architects (Freschi had plans for full design briefs and an outside architectural and planning committee as at Expo 67, but claims that these were suppressed).

Another new arrival at the end of 1982 was Ian Carter (from Williams Dewar Groat Carter), brought in as manager of design services and, subsequently, director of planning. He was to play a major role during the crucial 1983-84 planning period. His involvement in awarding the first architectural commissions meant that he had to put together selection criteria for all the core structures, including the entrance gates and the 3½ mile monorail system. The site was broken into 10 sections, each becoming the responsibility of a single firm. These were the pioneer "area architects". Other specific projects were to be addressed on an individual basis.

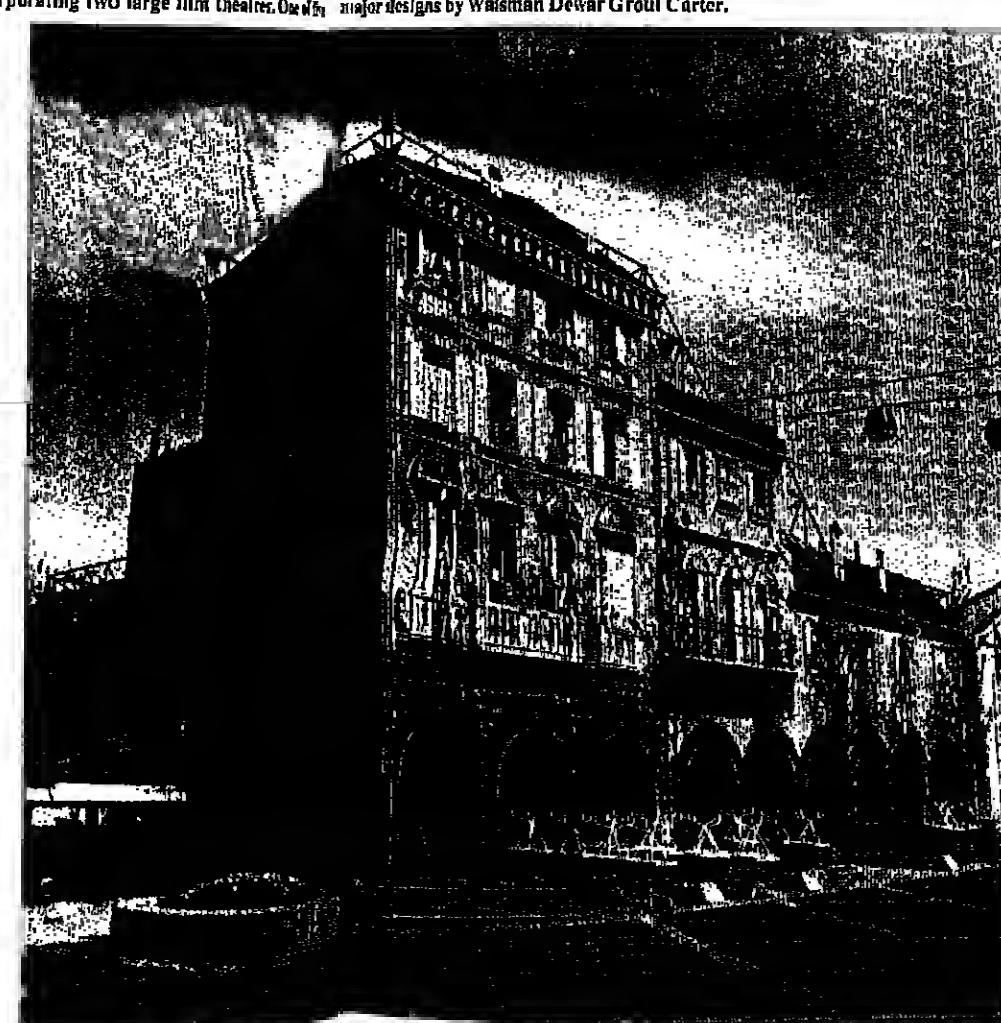
One of the area architects was Geoffrey Massey, son of actor Raymond Massey, and formerly a partner in the prestigious Erikson/Massey group. In 1984 he was awarded an area of six food and merchandising buildings. Also a veteran of Montreal

and Osaka, Massey is another who feels too little emphasis was placed by Expo 86 on the objective of masterminding quality design. "I never received a design critique for any of my work. And the planning decisions which were forthcoming were being made by people unqualified for the job."

In Massey's view it all came down to "a bureaucracy based on fear", with everything geared to revenue. A constant turnover of Expo staff, heads seeming to roll by the week, making it impossible for architects to maintain a consistent rapport with their employers.

Furthermore, like many of the area architects, Massey was dissatisfied with the Battaglia guidelines, and has a string of other grievances: the budget — overly generous in some areas, hopelessly inadequate in others, with no provision for osmosis; the alterations done by occupying tenants; and, most frustrating of all, designing without context. "We were basically providing shells, often without any idea where the buildings were to stand on the site, or what their precise functions might be."

But Ian Carter, an ardent Expo apologist despite his own dismissal in 1984, regards the criticisms as unrealistic in view of the exceptional nature of the project. Design critiques, of sorts, were given, and design reviews were conducted, principally through a series of symposia. In further defence of Expo he cites "the product mix", the necessary process of shifting buildings, partly as a tactical distribution of potential rivals — the China, USSR, USA and Cuba pavilions; the major corporations; the Canadian provinces. It meant the functional buildings could not immediately be anchored.



Geoffrey Massey's food and merchandising complex.

The Canadian Pacific Pavilion incorporating two large film theatres. One of the major designs by Williams Dewar Groat Carter.



Designing without context. The function of this building, by Geoffrey Massey, was changed three times after completion of design.

At one stage a specific entertainment area was planned; all amusement rides, video arcades and pizza parlours were to lie on one 8ha section. This was scrapped in mid-1984 and the components were scattered across the whole site, shoe-horned in where space could be found. With things happening faster than planners could react to them, a CAD system was brought in to assist the product mix. Architects' footprints were fed into the computer and then moved about. If all went to substantiate creative director Ron Woodall's view that "the architectural style of a world's fair is a series of elements that look like they shouldn't be next to one another".

Site preparation too was an elaborate process. It began in 1983 with demolition of existing light industrial structures. Marshy areas had to be filled and foundation strategies developed for dealing with the problematic glacial till which covers much of the site; 25,000 cubic metres of silt were dredged

from False Creek and 8ha of piling and decking were installed (over land as well as water). Construction then proceeded according to the master control standard, patterned on the Canadian National Building Code, but geared to the temporary nature of the site.

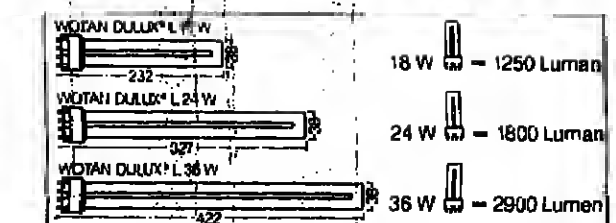
The main setback occurred in mid-1984 with the eruption of union problems following BC government insistence on an open-bidding for contracts. Previously treated as a single site and therefore the preserve of unionised construction firms, Expo was opened up through implementation of economic development zones (EDZ).

These allowed non-union firms to compete for specific projects. After Expo 86 closes on October 13, the site, part of a total package of 40ha owned by the BC Place Corporation (a Crown corporation), will enter a major redevelopment phase. With a projected eventual value of \$3 billion, BC Place will be made up of parcels leased to private development, parks, seawall walks and public facilities, and Expo legacy buildings. The first significant structure in this project, the 60,000-seat BC Place Stadium designed by Phillips Barratt and featuring the world's largest air-supported dome, was completed in 1983. BC Place is a central theme in Vancouver's hopes for increased international clout in the post-Expo age.

## WOTAN DULUX® L

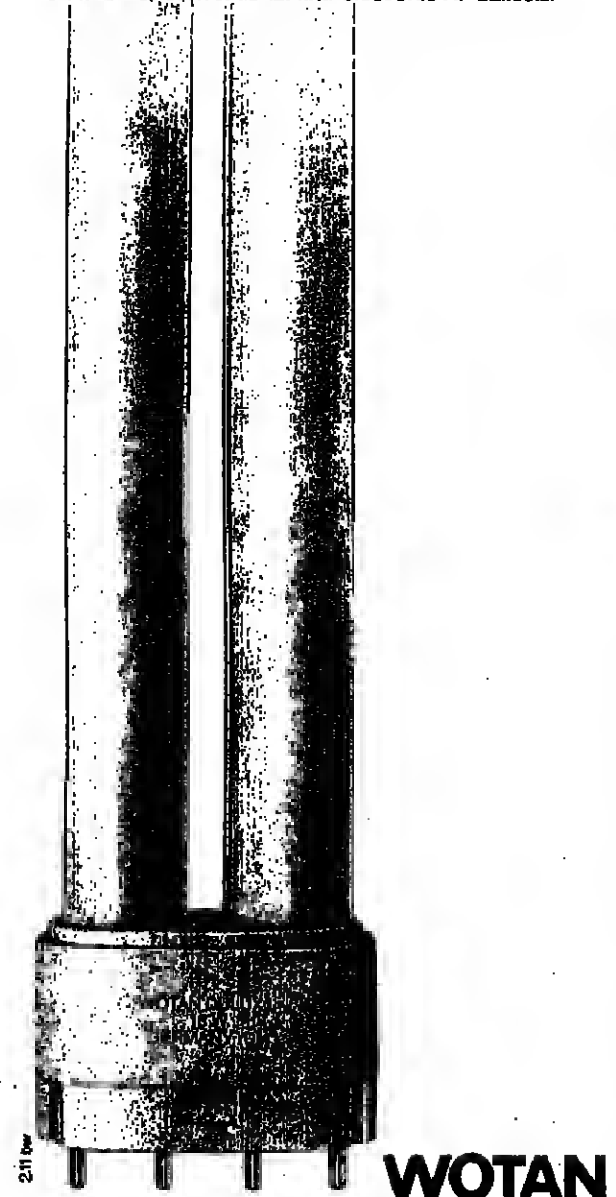
Imaginative lighting.

The WOTAN DULUX® L offers high luminous flux — at a third the length of conventional fluorescents. Its shape — flat and compact — allows a more imaginative approach to the construction of louvers and grid spacings for wall and ceiling lights. This quality of illumination is superb, with three MAXILUX® colours designed to meet the most demanding lighting conditions.



MAXILUX® LIGHT colours: White, warm white and INTERNA.

Suitable for conventional and electronic HF ballasts.



# BushBoard

For over 50 years,  
first name in laminated  
plastics fabrication

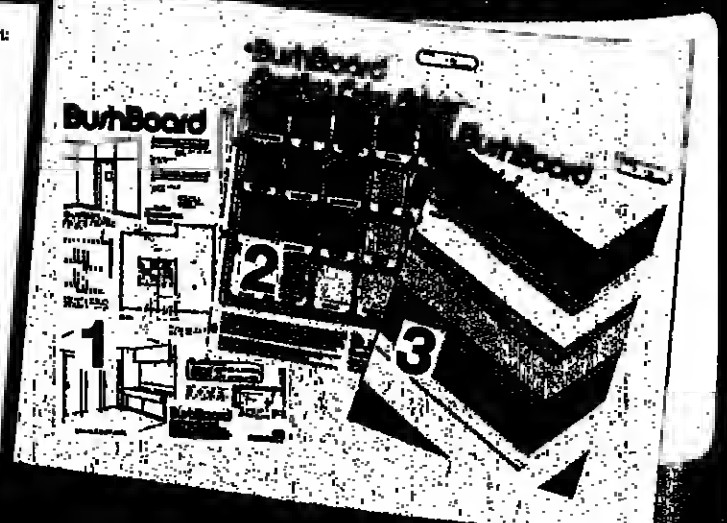
Now, from Bushboard, three good reasons why your next job will be perfect:

1. Bushboard's Idea Chart shows in 44 steps for quick and easy reference. Shows just a few ways Bushboard products can be used in construction for wall paneling; columns, rail and roller casters; post-tensioned sections incorporated in Formtek ceilings; office applications, and cubicle and vanity units.
2. Bushboard Specialist's Colour Selector. Standard colours, hand-picked to meet most needs, normally with smooth velour surface finish (alternative colours, patterns and surfaces also available of course for specialist). With this as a guide, you'll always get the colour right.
3. Bushboard Boarded Performance Board. Much more than a test chart showing the outstanding construction and performance features of the board. Must your board be fire or water resistant, for instance, or assembly with good physical durability? Here are all the permissions for getting the right board for the job.

The application... the colour... the classification... What else do you need to know about laminated plastics? Our free literature now!

Build better with  
**BushBoard**

Bushboard Limited



## SALES DIVISION



If you want to keep typewriter clutter out of sales policy discussions, you need Acordial movable Wall Systems. There's the Planscord system of individual panels, Ferrowall with its outer steel skin and robust, timber framed Lignawall. All of them provide flexibility of space combined with high quality of finish and maximum sound reduction.

**acordial**

Acordial (U.K.) Limited, Knebwell House, Carpenden Park, Welford, Northants NN8 6BQ. Tel: 01-428 0977 Telex: 282248

Acordial make a wide range of other movable walls for all types of applications. For literature, please send the coupon now, or phone 01-428 0977

Name .....

Position .....

Company/Organisation .....

Address .....

RD 8/6



## Books

## Energy design solution

The design of energy-responsive commercial buildings, US Solar Energy Research Institute (John Wiley, £54.35).

THERE have been so many books about the saving of energy in houses that it is refreshing to find a major publication about energy-conscious design in non-domestic buildings.

The design of energy-responsive commercial buildings is the result of several years of research and investigation into the design of medium to large-scale commercial buildings.

In any building design, there can be no "best" or "optimum" energy solution. As in any other part of the design, solutions will evolve which take account of many, often conflicting, factors. This makes the discussion of

energy issues difficult. It is easy to present abstract information on components — siting, insulation, heating systems and so on. It is much more difficult to consider the energy design for the building as a whole.

This book attempts to address energy issues from a whole-building standpoint. It does this by drawing on two valuable sources. First, it uses existing buildings to illustrate different approaches to energy issues. Secondly it draws on the experience of a series of short courses run with the American Institute of Architects.

The book is split into two halves. The first reviews and interprets the collective experience of the five principal authors. The second sets out a framework for design.

The information presented in Part One is intended to give the reader an understanding of the current level of knowledge in the energy field and to identify the principles, advantages and disadvantages of different environmental control options. Also, it assesses their influence on other building design considerations.

The opening chapters look at "climate adapted" buildings — in which energy issues have been thought about — and "climate-

## John Willoughby gives a round-up of recent publications on developments in energy conservation.

rejecting" buildings, which have a total reliance on their servicing systems. Many examples are used to illustrate these two extreme approaches to design, with the final chapter in Part One giving a brief overview of the range of possible alternatives, including some useful information on loads and costs.

In Part Two, the emphasis shifts from learning through the experiences of others to the presentation of a design framework that can be used to help with the design of energy-conscious buildings. The first chapter in this part outlines a recommended design approach which involves setting up a base case which can be tested on energy and cost grounds. Alternative solutions can then be tested against the base case.

Again, real designs are used to illustrate this and subsequent chapters, which deal with the application of the design approach, financial analysis and pre-design state energy analysis.

In the early chapters the book draws a parallel between the integration of energy issues in design today and the effect of the

1982. In all, 14 papers are reproduced. The initial ones deal with the effects on energy consumption of infrastructure and planning.

Two papers, by Richard Meier from the University of California and Peter Richaby from the Open University, attempt to integrate energy issues into models of land use and development patterns. They represent some initial ideas for assessing the energy implications of urban design, land use, planning and transport policies, but demonstrate that there is a long way to go before these issues are fully defined, let alone understood.

Another paper on the community aspects of energy use deals more specifically with energy consumption in selected village clusters in India. It gives a breakdown of the uses of different fuels and the use to which the fuels are put. The energy consumed in the production of building materials is the subject of another short paper, while the remaining text deals with building design for energy conservation.

A computer program for thermal simulation which has been developed at the Central Building Research Institute at Roorkee is covered by Parkash Chandra, while Vinod Gupta, the editor of the book, presents case studies of several energy-conscious non-domestic buildings.

It is important for Western architects dealing with building designs for developing countries to think about the implications of their energy strategy. It's tempting to solve the climate problems with an over-designed "hi-tech" solution which may be totally inappropriate for a developing economy. Learning from the experience contained in this book could be the first step towards an understanding of appropriate design for developing countries.

**Solar energy planning**, Phillip Tabb (McGraw-Hill, £30.50).

IT'S good to be taken back, away from the minutiae of everyday design problems, to be reminded of our dependence on solar energy and the finite nature of our fossil-fuel resources. Phillip Tabb does this by introducing *Solar energy planning* with a "space-ship Earth" approach. From this basis, he attempts to show in a historical context that solar design is not just a fad but something more fundamental.

Tabb is quick to point out that solar energy has its limitations, which he lists in the second chapter. The book then makes much of the concept of solar access before presenting ideas for design of single buildings, cluster developments, neighbourhood planning and residential settlements.

Tabb is quick to point out that solar energy has its limitations, which he lists in the second chapter. The book then makes much of the concept of solar access before presenting ideas for design of single buildings, cluster developments, neighbourhood planning and residential settlements.

Tabb is quick to point out that solar energy has its limitations, which he lists in the second chapter. The book then makes much of the concept of solar access before presenting ideas for design of single buildings, cluster developments, neighbourhood planning and residential settlements.

Tabb is quick to point out that solar energy has its limitations, which he lists in the second chapter. The book then makes much of the concept of solar access before presenting ideas for design of single buildings, cluster developments, neighbourhood planning and residential settlements.

Tabb is quick to point out that solar energy has its limitations, which he lists in the second chapter. The book then makes much of the concept of solar access before presenting ideas for design of single buildings, cluster developments, neighbourhood planning and residential settlements.

Tabb is quick to point out that solar energy has its limitations, which he lists in the second chapter. The book then makes much of the concept of solar access before presenting ideas for design of single buildings, cluster developments, neighbourhood planning and residential settlements.

"The solar catalogue" approach is avoided by using examples (many of which are the result of student projects at the University of Colorado) to illustrate the ideas for the design of isolated dwellings through to urban designs.

Plenty of checklists are included to help the designer develop his ideas. But, without any attempt to quantify the performance of the design alternatives that are presented, the book must remain solely an ideas book, and at £30.50 the ideas come pretty expensive.

**Passive and low energy architecture**, edited by Simon Yannis (Pergamon Press, £130).

THIS 850-page book contains papers produced for a conference on passive and low energy architecture held in June 1983. Ninety-seven papers, edited by Simon Yannis of the Architectural Association, gave a view of the state of the art of passive solar design and research work around the world.

This massive tome is split up into four parts.

Part I deals with case studies covering "New buildings", "Rehabilitation and retrofit", "Vernacular architecture" and "Planning and urban design".

Part II covers the research and development of systems and components.

Part III is called "Design aids" and covers general guidelines and computer modelling.

Part IV deals with management and looks at the issues involved with low energy design and its prospects for the future.

Anyone wishing to catch up on the latest thinking on solar design would do well to start with this book. Not only is there a wide range of papers, but many have a good set of references.

It is impossible to review all the papers, but it may be useful to list those produced by authors working in the UK: *Passive and low energy design* — D Michaelis. *Toward a better understanding of climate respecting design*, P A Page. *Three solar air-heated houses in a terrace with sunspace*, J Litter, C Martin. *Design of a low energy house near Chania, Crete*, B Ford, F Perez. *Passive solar retrofits in Athens*, S Yannis, N V Baker. *Environmental characteristics of the vernacular underground dwelling*, B Mulligan. *Selection and siting of low energy cooling systems for more humid climates*, P Haves. *Optimizing the design of natural circulation solar-energy water heaters*, B Norton, S D Probert. *Comparison of passive solar design methods*, J G F Little. *The Commission of the European Communities passive solar programme*, R M Lebed. *A passive solar design exercise*, S Yannis, K McCartney.

It is impossible to review all the papers, but it may be useful to list those produced by authors working in the UK: *Passive and low energy design* — D Michaelis. *Toward a better understanding of climate respecting design*, P A Page. *Three solar air-heated houses in a terrace with sunspace*, J Litter, C Martin. *Design of a low energy house near Chania, Crete*, B Ford, F Perez. *Passive solar retrofits in Athens*, S Yannis, N V Baker. *Environmental characteristics of the vernacular underground dwelling*, B Mulligan. *Selection and siting of low energy cooling systems for more humid climates*, P Haves. *Optimizing the design of natural circulation solar-energy water heaters*, B Norton, S D Probert. *Comparison of passive solar design methods*, J G F Little. *The Commission of the European Communities passive solar programme*, R M Lebed. *A passive solar design exercise*, S Yannis, K McCartney.

It is impossible to review all the papers, but it may be useful to list those produced by authors working in the UK: *Passive and low energy design* — D Michaelis. *Toward a better understanding of climate respecting design*, P A Page. *Three solar air-heated houses in a terrace with sunspace*, J Litter, C Martin. *Design of a low energy house near Chania, Crete*, B Ford, F Perez. *Passive solar retrofits in Athens*, S Yannis, N V Baker. *Environmental characteristics of the vernacular underground dwelling*, B Mulligan. *Selection and siting of low energy cooling systems for more humid climates*, P Haves. *Optimizing the design of natural circulation solar-energy water heaters*, B Norton, S D Probert. *Comparison of passive solar design methods*, J G F Little. *The Commission of the European Communities passive solar programme*, R M Lebed. *A passive solar design exercise*, S Yannis, K McCartney.

It is impossible to review all the papers, but it may be useful to list those produced by authors working in the UK: *Passive and low energy design* — D Michaelis. *Toward a better understanding of climate respecting design*, P A Page. *Three solar air-heated houses in a terrace with sunspace*, J Litter, C Martin. *Design of a low energy house near Chania, Crete*, B Ford, F Perez. *Passive solar retrofits in Athens*, S Yannis, N V Baker. *Environmental characteristics of the vernacular underground dwelling*, B Mulligan. *Selection and siting of low energy cooling systems for more humid climates*, P Haves. *Optimizing the design of natural circulation solar-energy water heaters*, B Norton, S D Probert. *Comparison of passive solar design methods*, J G F Little. *The Commission of the European Communities passive solar programme*, R M Lebed. *A passive solar design exercise*, S Yannis, K McCartney.

It is impossible to review all the papers, but it may be useful to list those produced by authors working in the UK: *Passive and low energy design* — D Michaelis. *Toward a better understanding of climate respecting design*, P A Page. *Three solar air-heated houses in a terrace with sunspace*, J Litter, C Martin. *Design of a low energy house near Chania, Crete*, B Ford, F Perez. *Passive solar retrofits in Athens*, S Yannis, N V Baker. *Environmental characteristics of the vernacular underground dwelling*, B Mulligan. *Selection and siting of low energy cooling systems for more humid climates*, P Haves. *Optimizing the design of natural circulation solar-energy water heaters*, B Norton, S D Probert. *Comparison of passive solar design methods*, J G F Little. *The Commission of the European Communities passive solar programme*, R M Lebed. *A passive solar design exercise*, S Yannis, K McCartney.

It is impossible to review all the papers, but it may be useful to list those produced by authors working in the UK: *Passive and low energy design* — D Michaelis. *Toward a better understanding of climate respecting design*, P A Page. *Three solar air-heated houses in a terrace with sunspace*, J Litter, C Martin. *Design of a low energy house near Chania, Crete*, B Ford, F Perez. *Passive solar retrofits in Athens*, S Yannis, N V Baker. *Environmental characteristics of the vernacular underground dwelling*, B Mulligan. *Selection and siting of low energy cooling systems for more humid climates*, P Haves. *Optimizing the design of natural circulation solar-energy water heaters*, B Norton, S D Probert. *Comparison of passive solar design methods*, J G F Little. *The Commission of the European Communities passive solar programme*, R M Lebed. *A passive solar design exercise*, S Yannis, K McCartney.

## Hevac 86 on course to be a winner

FOLLOWING on the success of the 1984 Hevac exhibition which attracted 24,000 registered trade visitors — about three times more than at any other UK exhibition for the industry — International Hevac 86, which takes place at the NEC from May 11-15, seems set to be an even greater success.

Some 260 home and overseas exhibitors will be at the exhibition, occupying more than 11,000sq m of space. Early information suggests that visitor attendance should be good too — both in terms of quantity and quality of visitor.

A series of lunchtime seminars will take place, two per day from Monday to Thursday. Each seminar is an hour long and covers such subjects as sound control, air handling equipment, fire and smoke protection, domestic heating and hot water controls, building and energy management systems, heat exchange and the future of building and building services.

**If you would like more information on the products on these pages, fill in and return the pre-paid enquiry card**

## Burners

RANGING in capacity from 100,000Btu/hr upwards, Midco Europe's make-up-air burners will be on display at the NEC. They can be built up into many configurations to suit particular applications. They are used in direct gas-fired space heaters, process air heaters and air handling units to return a net efficiency of 92 percent. The new product on the stand is the 100,000Btu/hr burner suitable for pilot or direct spark ignition.

**Enter 101 ON EXPRESS ENQUIRY CARD**

## Custom-built radiators

RUNTLRAD will be exhibiting a selection of radiators which have been designed to meet the requirements of specific applications. Alongside examples of its stock patterns (which include horizontal panel radiators with extended headers to form floor supports and rear connections to conceal pipework, and high output skirting radiators) will be examples of its custom-built radiators. These follow detailed discussions between Runtalrad's design staff and the building designers.

**Enter 102 ON EXPRESS ENQUIRY CARD**

## Fire dampers

ACTIONAIR Equipment's new Self Latching Cassette release mechanism and Fire/Shield stainless steel curtain fire damper combination has just passed the first fire test to the standards laid down in the new ISO draft standard on fire dampers. Come along to the company's stand and learn all about this success and examine the equipment for yourself.

**Enter 103 ON EXPRESS ENQUIRY CARD**

## Water heater

TWO new Hiflo storage water heaters will be the central feature of Andrews Industrial Equipment's display. These complement the company's established range and provide an efficient source of instant, high volume hot water, independent of the central boiler plant. The new heaters are designed to cope with high volume, intermittent demand, such as is encountered in catering and sports buildings. The storage tanks are linked to appropriately sized water heaters.

**Enter 104 ON EXPRESS ENQUIRY CARD**

## New products/International Hevac 86

## Air movement parts

TWO products which have been recently added to Specialised Air Movement Equipment's range will form the backbone of the company's first independent display at Hevac. These are the Unites flexible connector for simple and economical air-tight duct connections and the innovative Unites duct access doors, which dispose of the need to have conventional fixing frames. Other products include fire dampers, valves, grilles and sound attenuators.

**Enter 105 ON EXPRESS ENQUIRY CARD**

## Boilers

CELT single-point instantaneous water heaters and Briony Multipoints will be demonstrated on Chaffoteaux's stand. These are at the small end of the company's range — a range which includes other gas-fired equipment for domestic and commercial premises such as the Challenger range of wall hung domestic boilers with outputs from 30,000 to 50,000Btu/hr and the Flexiflame large domestic and commercial boilers with outputs up to 123kW.

**Enter 106 ON EXPRESS ENQUIRY CARD**

## Air-conditioners

THREE new products are on display on the Airscale International Airconditioning stand. The new Mistral range of mini upflow in downflow computer room units in 12 basic models is one of the new arrivals. Then there is the Zephyr range of central station air handling units. Lastly, Airscale has launched the Logicool unit — an in-room main frame chiller which has been developed especially for use in the computer room.

**Enter 107 ON EXPRESS ENQUIRY CARD**

## Radiators

CENTRE piece of the Zehnder display on the Harnett stand will be the high output Radiatorator — a low profile radiator which combines good appearance with high efficiency. It is also particularly tough, being made of 1.5mm steel. An even more robust model uses 2.5mm steel. In addition, the stand will contain examples of Zehnder's Slim Line Panel radiator, a column radiator, which is supplied in 150 different colours, and nine sizes of towel radiators, also available in 150 colours.

**Enter 108 ON EXPRESS ENQUIRY CARD**

## It's a sure sign they didn't use Peelabond

In the world of stuck down floorcoverings, what goes down must eventually come up. And that's when your problems can start. Unless you've used Peelabond.

When Peelabond laminate is installed between substrate and decorative floorcovering subsequent removal is simple. You can strip both laminate and floorcovering together. No mess. No disruption. No cost. And it's guaranteed to work.

Peelabond leaves all surfaces ready for recovering. It's the simple way to ensure that floors in leased accommodation can be restored to original condition.

Peelabond is easy to lay and can be

used with most textile floorcoverings. Particularly foam-backed carpets. Specify Peelabond now and save yourself a whole heap of trouble in the future. Ask for full details now.

## F. Ball &amp; Company Limited

Barnfield Industrial Estate,  
Leek, Staffordshire, ST13 5QH.  
Tel: 0583 365512.

Serving Industry  
for 100 years

PEELABOND



Every move brings you closer to Syntop.

Modern office technology demands thousands of body movements throughout the working day.

Modern office chairs, however, usually leave most of the moves to you. Which not only impairs efficiency but results — sooner or later — in real bodily illness.

Now meet the exception: Syntop, from Giroflex. Whenever you rotate, or move forwards, or backwards, or change posture in any way, Syntop adjusts with you — synchronously — to give correct back support and optimal comfort in every position.

The name of this unique action is Multi-Move. And it typifies the major technological advances which result from continual Giroflex research and development.

No company in the world comes closer to perfection in office seating.

(You can see Syntop — one of nine Giroflex ranges now available — at our new central London showroom, 44-46 Eagle Street, London WC1R 4AP. Tel. 01-831 0031.)

giroflex

The best chair in the office.

Syntop, from Giroflex.

**Enter 33 ON EXPRESS ENQUIRY CARD**



## New products/International Hevac 86

## Aluminium radiators

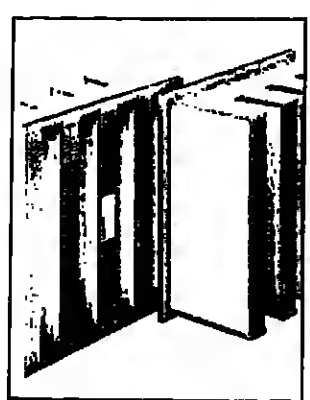
SELECTION column and low surface temperature convectors radiators will be featured on Sensortherm's stand. Superalloys are the sectional radiators, manufactured from extruded aluminium sections. They are high output devices suitable for most installations, especially domestic. Saferads are Sensortherm's aluminium convector radiators with heavy duty emitters, built low surface temperature, flat front panels which allows decoration with work, fabric or timber.



Enter 109 ON EXPRESS ENQUIRY CARD

## Clean room systems

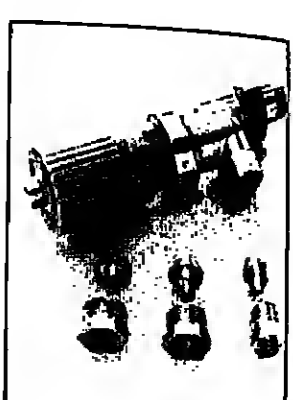
LUWA, the UK subsidiary of the Swiss environmental control company, will feature both clean room systems and replacement air filters. The clean room display will include the CG laminar flow distributor and RRM/RRP-T ceiling modules. Luwa's RRP-T series high efficiency air filters and a selection of the company's rigid replacement filters designed as a cost-effective successor to bag filters.



Enter 120 ON EXPRESS ENQUIRY CARD

## Valves

On the Haemina stand three new or improved products can be seen, all of which feature inexpensive energy saving. The range of Temset thermostatic radiator valves have been improved and now have a positive off position, frost-protection, choice of numbered or centigrade scales etc. The second device is a new control — the Z2V — for air-conditioning; while the third is an automatic exhaust damper. Also on the same stand will be the Meges range of Lockshield valves with five functions.



Enter 122 ON EXPRESS ENQUIRY CARD

## Radiant heaters

GAS-fired radiant heaters and their control equipment are being shown by Ambi-Rad. This company has three U tube models, a fan assisted linear heater and a "herringbone" installation. Ambi-Rad heaters combine high radiant heat output with low fuel consumption and are suitable for all types of industrial buildings, hypermarkets, glasshouses, churches and leisure centres. Versions of its heaters can be supplied for mains gas or propane.

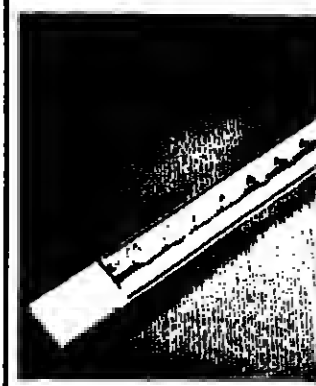
Enter 124 ON EXPRESS ENQUIRY CARD

## Ironmongery

HYDRO-AIR, after extensive research, has introduced a new range of builders' ironmongery which is detailed in a new 20-page brochure. New devices include: a stainless steel alternative to the butterfly wall tie with better holding power, the P8 Sole Tie Anchor for use in traditional or timber frame construction and designed for fitting by the bricklayer, and a new truss clip (P4) which is stronger than previous models.

Enter 126 ON EXPRESS ENQUIRY CARD

## Fluorescent fittings



MANY of the finishes, styles and installation features normally associated with one-off luminaires are included in Moortie's Broadspread range of competitively priced fluorescent fittings. A newcomer to the range — the 130 twin surface mounted model — has a sleek, geometrically rounded, satin anodised extruded aluminium casing. All new models incorporate the Broadspread profiled reflector which gives controlled light distribution.

Enter 128 ON EXPRESS ENQUIRY CARD

## Floral displays



CREATED from natural dried glass and flowers using a new technique, Greenleaf has introduced a range of sculptured floral bouquets. These features can be produced in any colour, shape, texture or design and all can be flame-proofed to full British Standard requirements. Greenleaf has extensive experience in creating, installing and maintaining real plant displays, as well as in displays which include polyester silk plants.

Enter 130 ON EXPRESS ENQUIRY CARD

## Control

WHETHER it is a domestic heating system, or a commercial heating and ventilating installation, Honeywell Control Systems has a range of controls from which to choose. Its Residential Division will be showing its successful Sundial Plan range of energy saving equipment, now its new Solid Fuel Panel Sundial for use when a solid fuel appliance is linked to gas or oil boiler. Other new products include the VT117 Thermostatic radiator valve and the AQ6000 compensating control package.

Enter 110 ON EXPRESS ENQUIRY CARD

## Water heaters

SAID to be the first commercial multi-fuel water heater with reliable damper operation, which reduces stand-by losses to a minimum, the Jansen in its many sizes will be exhibited by Johnson & Starley. Also on show will be an important new product to replace and upgrade heating systems in both public and private housing developments — the Hiten hot water generator. This is located within an air heater cabinet and, in addition to supplying domestic hot water, can also heat up in three radiators.

Enter 115 ON EXPRESS ENQUIRY CARD

## Flues



MONODRAUGHT Flues is approaching the exhibition in good heart. Its system is now fully recognised by the NCB and SFAS as a balanced flue for solid fuel appliances. In addition, the system now has BS1 approval for commercial gas applications, and is included in the new BS 6644. The Monodraught system provides high level ventilation to an otherwise sealed compartment, eliminating the need to provide high and low level air ducts, the new fan dilution system will also be on show.

Enter 121 ON EXPRESS ENQUIRY CARD

## Golden jubilee



IN its 50th year, Stelrad has invested in a truly huge stand on which can be seen a massive array of its domestic boilers and radiators of all types, as well as much of its commercial equipment. Also, Stelrad will be giving visitors a peek into the future developments of the group. The display will also include a motor racing car and details of the company's sponsorship of an attempt on the British land speed motorcycle record.

Enter 123 ON EXPRESS ENQUIRY CARD

## Hi-tech system

HI-TECH, yet competitively priced — these are two major features of the EY2400 building management system being displayed by Sauter Automation. Designed with a flexibility which allows any size of building to be serviced, the EY2400 has been used on some 200 installations. Being launched on the stand will be the KS2 stand-alone, fully intelligent, building management system substation. These products will be supported by a range of Sauter control valves.

Enter 125 ON EXPRESS ENQUIRY CARD

## Building repair

RBR Contract Services has published a new folder of fact sheets describing its repair methods for concrete, masonry and timber components in buildings. Resin injection techniques are emphasised in RBR's work and these are briefly described, including an article on restoring life to old timbers by Chris Bowden of RBR. Mini restoration case studies are included concerning concrete in such prestigious locations as Hampton Court Palace and Kew Palace.

Enter 127 ON EXPRESS ENQUIRY CARD

## Fencing

HIGH levels of security can be achieved using BRC Engineering Company's Weldfence 338 with two mesh sizes and in single or double-skin panels. Maximum fence height is 5.3m and the mesh is fixed to Brenforce bi-steel posts and topped with double-coil barbed tape obstacle topping, supported on T-bars. Construction is of steel wire, hot dip galvanised to BS 729 and/or plastic coated. There are various sizes of mesh available.

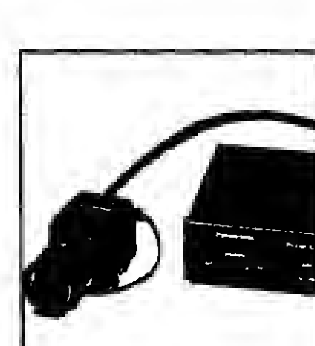
Enter 129 ON EXPRESS ENQUIRY CARD



## CCTV camera

WITH lighting levels as low as 5 lux, the new Panasonic WV-CD50 miniaturised monochrome CCTV camera still produces crisp images. The introduction of Couple Charge Device technology ensures that in bright conditions no burn-in spots occur. Low maintenance, low power consumption and stable performance are characteristics of this instrument which weighs only 200 grams and measures 41 x 41 x 55 mm without lens. The WV-CD52 power supply comes with the camera and can be located up to 100m away.

Enter 131 ON EXPRESS ENQUIRY CARD



## Energy control

ENERGY efficient controls and systems for monitoring and controlling the use of energy in industrial and commercial buildings are the business of JEL Energy Conservation Services. Five new additions to the Micro Series of controllers, designed primarily for the smaller application, will be on show for the first time. These are either stand-alone devices or can communicate with the Jelsar energy management system.

Enter 111 ON EXPRESS ENQUIRY CARD

## Ducting

MAKING a direct challenge to the considerable quantities of imported flexible ducting used in this country, Flexible Ducting of Glasgow is launching a new air conditioning ducting which is designed to meet relevant British, German and French specifications, and which, it is said, has a quality equal to anything produced in Europe. A significant price advantage is claimed for this UK product, which will make its debut at Hevac.

Enter 116 ON EXPRESS ENQUIRY CARD

## Heating

CONSISTING of a modular arrangement of purpose-made panels which hide and protect piped or wired services, Hudevad, Britain's new integrated perimeter heating system, will be on show at the NEC. It will be adequately supported by the company's families of radiators. These include the distinctive Plan radiator, which has been well established for some time, the PS and PSK ranges of kitmarked radiators and the vandalproof LST range.

Enter 112 ON EXPRESS ENQUIRY CARD

## Instrumentation

TESTOTERM's stand will display a selection of instruments for measuring air flow velocity, humidity and temperature. These include the Testover, handheld, multi-channel air flow velocity meter — available in three models — and the 9310 with a range of special probes for measuring ambient air temperature and surface temperatures. These are just a few of Testoterm's considerable range of handheld instruments which have been specially developed for the heating and ventilating industry.

Enter 117 ON EXPRESS ENQUIRY CARD

## Energy plan

ACM energy management system is being shown for the first time by Allen-Martin Conservation. This software control package enables the building management system to be supervised and controlled with a power comparable to minicomputer-based systems — but running on almost any low-cost business computer. The package uses a mouse "point-and-click" technique to call up animated graphical screens showing zone conditions and providing easy manipulation of all parameters.

Enter 113 ON EXPRESS ENQUIRY CARD

## Programmer

ADVANCE details of a new generation of an electronic domestic heating programmer will be unveiled by Advance at the exhibition. Neatly packaged in an elegant, slimline format, this new 24-hour programmer features simple-to-operate slide controls which can be used to control heating and hot water, or domestic hot water alone.

Enter 118 ON EXPRESS ENQUIRY CARD

## Digital controls

HEVAC provides a preview of Danfoss's MPS range of coordinated microprocessor-based, fully digital commercial heating controls. These have been designed for easy programming and adjustment, with an inbuilt communication facility which allows present and future link-up to EMS systems. The system complements the recently launched RPS 2024 programmable zone control which governs up to 24 zones and will interface with weather compensators, lighting systems, fans, valves, pumps and boilers.

Enter 114 ON EXPRESS ENQUIRY CARD

## LP gas

CALOR Gas will be displaying a comprehensive range of equipment which can be used to provide full gas central heating when the site of the installation is miles beyond the end of the natural gas mains. Calor Gas is the country's biggest supplier and distributor of liquefied petroleum gas, which provides a clean, efficient and versatile alternative to other fuels. A wide variety of LPG appliances from many manufacturers will be on the Calor Gas stand.

Enter 119 ON EXPRESS ENQUIRY CARD



## Steel is ideal

RP Tubing by Mannesmann, incorporates the latest technology in construction and design aimed to meet the advanced needs of today's steel structures. Some of the advantages of using modern welded steel profiles include:

- Superior strength
- Long service life
- Low maintenance
- Easy installation
- Versatility in design
- High resistance to corrosion
- Excellent fire resistance
- High resistance to impact
- High resistance to vibration
- High resistance to fatigue
- High resistance to creep
- High resistance to stress
- High resistance to strain
- High resistance to deformation
- High resistance to fracture
- High resistance to buckling
- High resistance to twisting
- High resistance to bending
- High resistance to stretching
- High resistance to compression
- High resistance to tension
- High resistance to shear
- High resistance to torsion
- High resistance to flexure
- High resistance to deflection
- High resistance to settlement
- High resistance to uplift
- High resistance to sliding
- High resistance to overturning
- High resistance to vibration
- High resistance to noise
- High resistance to pollution
- High resistance to weathering
- High resistance to aging
- High resistance to discoloration
- High resistance to staining
- High resistance to fading
- High resistance to cracking
- High resistance to peeling
- High resistance to flaking
- High resistance to chipping
- High resistance to abrasion
- High resistance to erosion
- High resistance to corrosion
- High resistance to oxidation
- High resistance to reduction
- High resistance to neutralization
- High resistance to acidification
- High resistance to alkalization
- High resistance to saltation
- High resistance to sulfation
- High resistance to nitration
- High resistance to phosphatation
- High resistance to silicification
- High resistance to carbonization
- High resistance to hydrogenation
- High resistance to dehydrogenation
- High resistance to halogenation
- High resistance to dehalogenation
- High resistance to fluorination
- High resistance to defluorination
- High resistance to chlorination
- High resistance to dechlorination
- High resistance to bromination
- High resistance to debromination
- High resistance to iodination
- High resistance to deiodination
- High resistance to cyanation
- High resistance to decyanation
- High resistance to isocyanation
- High resistance to deisocyanation
- High resistance to thiocyanation
- High resistance to dethiocyanation
- High resistance to selenation
- High resistance to deselenation
- High resistance to telluration
- High resistance to detelluration
- High resistance to bismuthation
- High resistance to debismuthation
- High resistance to molybdenation
- High resistance to demolybdenation
- High resistance to rheniation
- High resistance to derheniation
- High resistance to cobaltation
- High resistance to decobaltation
- High resistance to nickelation
- High resistance to denickelation
- High resistance to copperation
- High resistance to decopperation
- High resistance to zincation
- High resistance to dezincation
- High resistance to cadmatation
- High resistance to decadmation
- High resistance to mercuryation
- High resistance to demercuryation
- High resistance to platinumation
- High resistance to deplatinumation
- High resistance to goldation
- High resistance to degoldation
- High resistance to silveration
- High resistance to desilveration
- High resistance to palladiumation
- High resistance to depalladiumation
- High resistance to osmiumation
- High resistance to deosmiumation
- High resistance to iridiumation
- High resistance to deiridiumation
- High resistance to rutheniumation
- High resistance to derutheniumation
- High resistance to rhodiumation
- High resistance to derhodiumation
- High resistance to palladiumation
- High resistance to depalladiumation
- High resistance to silveration
- High resistance to desilveration
- High resistance to goldation
- High resistance to degoldation
- High resistance to platinumation
- High resistance to deplatinumation
- High resistance to mercuryation
- High resistance to demercuryation
- High resistance to cadmatation
- High resistance to decadmation
- High resistance to zincation
- High resistance to dezincation
- High resistance to copperation
- High resistance to decopperation
- High resistance to nickelation
- High resistance to denickelation
- High resistance to cobaltation
- High resistance to decobaltation
- High resistance to rheniation
- High resistance to derheniation
- High resistance to telluration
- High resistance to detelluration
- High resistance to bismuthation
- High resistance to debismuthation
- High resistance to molybdenation
- High resistance to demolybdenation
- High resistance to selenation
- High resistance to deselenation
- High resistance to fluorination
- High resistance to defluorination
- High resistance to chlorination
- High resistance to dechlorination
- High resistance to bromination
- High resistance to debromination
- High resistance to iodination
- High resistance to deiodination
- High resistance to cyanation
- High resistance to decyanation
- High resistance to isocyanation
- High resistance to deisocyanation
- High resistance to thiocyanation
- High resistance to dethiocyanation
- High resistance to selenation
- High resistance to deselenation
- High resistance to telluration
- High resistance to detelluration
- High resistance to bismuthation
- High resistance to debismuthation
- High resistance to molybdenation
- High resistance to demolybdenation
- High resistance to rheniation
- High resistance to derheniation
- High resistance to cobaltation
- High resistance to decobaltation
- High resistance to nickelation
- High resistance to denickelation
- High resistance to copperation
- High resistance to decopperation
- High resistance to zincation
- High resistance to dezincation
- High resistance to cadmatation
- High resistance to decadmation
- High resistance to mercuryation
- High resistance to demercuryation
- High resistance to platinumation
- High resistance to deplatinumation
- High resistance to goldation
- High resistance to degoldation
- High resistance to silveration
- High resistance to desilveration
- High resistance to palladiumation
- High resistance to depalladiumation
- High resistance to osmiumation
- High resistance to deosmiumation
- High resistance to iridiumation
- High resistance to deiridiumation
- High resistance to rutheniumation
- High resistance to derutheniumation
- High resistance to rhodiumation
- High resistance to derhodiumation
- High resistance to palladiumation
- High resistance to depalladiumation
- High resistance to silveration
- High resistance to desilveration
- High resistance to goldation
- High resistance to degoldation
- High resistance to platinumation
- High resistance to deplatinumation
- High resistance to mercuryation
- High resistance to demercuryation
- High resistance to cadmatation
- High resistance to decadmation
- High resistance to zincation
- High resistance to dezincation
- High resistance to copperation
- High resistance to decopperation
- High resistance to nickelation
- High resistance to denickelation
- High resistance to cobaltation
- High resistance to decobaltation
- High resistance to rheniation
- High resistance to derheniation
- High resistance to telluration
- High resistance to detelluration
- High resistance to bismuthation
- High resistance to debismuthation
- High resistance to molybdenation
- High resistance to demolybdenation
- High resistance to selenation
- High resistance to deselenation
- High resistance to fluorination
- High resistance to defluorination
- High resistance to chlorination
- High resistance to dechlorination
- High resistance to bromination
- High resistance to debromination
- High resistance to iodination
- High resistance to deiodination
- High resistance to cyanation
- High resistance to decyanation
- High resistance to isocyanation
- High resistance to deisocyanation
- High resistance to thiocyanation
- High resistance to dethiocyanation
- High resistance to selenation
- High resistance to deselenation
- High resistance to telluration
- High resistance to detelluration
- High resistance to bismuthation
- High resistance to debismuthation
- High resistance to molybdenation
- High resistance to demolybdenation
- High resistance to selenation
- High resistance to deselenation
- High resistance to telluration
- High resistance to detelluration
- High resistance to bismuthation
- High resistance to debismuthation
- High resistance to molybdenation
- High resistance to demolybdenation
- High resistance to selenation
- High resistance to deselenation
- High resistance to telluration
- High resistance to detelluration
- High resistance to bismuthation
- High resistance to debismuthation
- High resistance to molybdenation
- High resistance to demolybdenation
- High resistance to selenation
- High resistance to deselenation
- High resistance to telluration
- High resistance to detelluration
- High resistance to bismuthation
- High resistance to debismuthation
- High resistance to molybdenation
- High resistance to demolybdenation
- High resistance to selenation
- High resistance to deselenation
- High resistance to telluration
- High resistance to detelluration
- High resistance to bismuthation
- High resistance to debismuthation
- High resistance to molybdenation
- High resistance to demolybdenation
- High resistance to selenation
- High resistance to deselenation
- High resistance to telluration
- High resistance to detelluration
- High resistance to bismuthation
- High resistance to debismuthation
- High resistance to molybdenation
- High resistance to demolybdenation
- High resistance to selenation
- High resistance to deselenation
- High resistance to telluration
- High resistance to detelluration
- High resistance to bismuthation
- High resistance to debismuthation
- High resistance to molybdenation
- High resistance to demolybdenation
- High resistance to selenation
- High resistance to deselenation
- High resistance to telluration
- High resistance to detelluration
- High resistance to bismuthation
- High resistance to debismuthation
- High resistance to molybdenation
- High resistance to demolybdenation
- High resistance to selenation
- High resistance to deselenation
- High resistance to telluration
- High resistance to detelluration
- High resistance to bismuthation
- High resistance to debismuthation
- High resistance to molybdenation
- High resistance to demolybdenation
- High resistance to selenation
- High resistance to deselenation
- High resistance to telluration
- High resistance to detelluration
- High resistance to bismuthation
- High resistance to debismuthation
- High resistance to molybdenation
- High resistance to demolybdenation
- High resistance to selenation
- High resistance to deselenation
- High resistance to telluration
- High resistance to detelluration
- High resistance to bismuthation
- High resistance to debismuthation
- High resistance to molybdenation
- High resistance to demolybdenation
- High resistance to selenation
- High resistance to deselenation
- High resistance to telluration
- High resistance to detelluration
- High resistance to bismuthation
- High resistance to debismuthation
- High resistance to molybdenation
- High resistance to demolybdenation
- High resistance to selenation
- High resistance to deselenation
- High resistance to telluration
- High resistance to detelluration
- High resistance to bismuthation
- High resistance to debismuthation
- High resistance to molybdenation
- High resistance to demolybdenation
- High resistance to selenation
- High resistance to deselenation
- High resistance to telluration
- High resistance to detelluration
- High resistance to bismuthation
- High resistance to debismuthation
- High resistance to molybdenation
- High resistance to demolybdenation
- High resistance to selenation
- High resistance to deselenation
- High resistance to telluration
- High resistance to detelluration
- High resistance to bismuthation
- High resistance to debismuthation
- High resistance to molybdenation
- High resistance to demolybdenation
- High resistance to selenation
- High resistance to deselenation
- High resistance to telluration
- High resistance to detelluration
- High resistance to bismuthation
- High resistance to debismuthation
- High resistance to molybdenation
- High resistance to demolybdenation
- High resistance to selenation
- High resistance to deselenation
- High resistance to telluration
- High resistance to detelluration
- High resistance to bismuthation
- High resistance to debismuthation
- High resistance to molybdenation
- High resistance to demolybdenation
- High resistance to selenation
- High resistance to deselenation
- High resistance to telluration
- High resistance to detelluration
- High resistance to bismuthation
- High resistance to debismuthation
- High resistance to molybdenation
- High resistance to demolybdenation
- High resistance to selenation
- High resistance to deselenation
- High resistance to telluration
- High resistance to detelluration
- High resistance to bismuthation
- High resistance to debismuthation
- High resistance to molybdenation
- High resistance to demolybdenation
- High resistance to selenation
- High resistance to deselenation
- High resistance to telluration
- High resistance to detelluration
- High resistance to bismuthation
- High resistance to debismuthation
- High resistance to molybdenation
- High resistance to demolybdenation
- High resistance to selenation
- High resistance to deselenation
- High resistance to telluration
- High resistance to detelluration
- High resistance to bismuthation
- High resistance to debismuthation
- High resistance to molybdenation
- High resistance to demolybdenation
- High resistance to selenation
- High resistance to deselenation
- High resistance to telluration
- High resistance to detelluration
- High resistance to bismuthation
- High resistance to debismuthation
- High resistance to molybdenation
- High resistance to demolybdenation
- High resistance to selenation
- High resistance to deselenation
- High resistance to telluration
- High resistance to detelluration
- High resistance to bismuthation
- High resistance to debismuthation
- High resistance to molybdenation
- High resistance to demolybdenation
- High resistance to selenation
- High resistance to deselenation
- High resistance to telluration
- High resistance to detelluration
- High resistance to bismuthation
- High resistance to debismuthation
- High resistance to molybdenation
- High resistance to demolybdenation
- High resistance to selenation
- High resistance to deselenation
- High resistance to telluration
- High resistance to detelluration
- High resistance to bismuthation
- High resistance to debismuthation
- High resistance to molybdenation
- High resistance to demolybdenation
- High resistance to selenation
- High resistance to deselenation
- High resistance to telluration
- High resistance to detelluration
- High resistance to bismuthation
- High resistance to debismuthation
- High resistance to molybdenation
- High resistance to demolybdenation
- High resistance to selenation
- High resistance to deselenation
- High resistance to telluration
- High resistance to detelluration
- High resistance to bismuthation
- High resistance to debismuthation
- High resistance to molybdenation
- High resistance to demolybdenation
- High resistance to selenation
- High resistance to deselenation
- High resistance to telluration
- High resistance to detelluration
- High resistance to bismuthation
- High resistance to debismuthation
- High resistance to molybdenation
- High resistance to demolybdenation
- High resistance to selenation
- High resistance to deselenation
- High resistance to telluration
- High resistance to detelluration
- High resistance to bismuthation
- High resistance to debismuthation
- High resistance to molybdenation
- High resistance to demolybdenation
- High resistance to selenation
- High resistance to deselenation
- High resistance to telluration
- High resistance to detelluration
- High resistance to bismuthation
- High resistance to debismuthation
- High resistance to molybdenation
- High resistance to demolybdenation
- High resistance to selenation
- High resistance to deselenation
- High resistance to telluration
- High resistance to detelluration
- High resistance to bismuthation
- High resistance to debismuthation
- High resistance to molybdenation
- High resistance to demolybdenation
- High resistance to selenation
- High resistance to deselenation
- High resistance to telluration
- High resistance to detelluration
- High resistance to bismuthation
- High resistance to debismuthation
- High resistance to molybdenation
- High resistance to demolybdenation
- High resistance to selenation
- High resistance to deselenation
- High resistance to telluration
- High resistance to detelluration
- High resistance to bismuthation
- High resistance to debismuthation
- High resistance to molybdenation
- High resistance to demolybdenation
- High resistance to selenation
- High resistance to deselenation
- High resistance to telluration
- High resistance to detelluration
- High resistance to bismuthation
- High resistance to debismuthation
- High resistance to molybdenation
- High resistance to demolybdenation
- High resistance to selenation
- High resistance to deselenation
- High resistance to telluration
- High resistance to detelluration
- High resistance to bismuthation
- High resistance to debismuthation
- High resistance to molybdenation
- High resistance to demolybdenation
- High resistance to selenation
- High resistance to deselenation
- High resistance to telluration
- High resistance to detelluration
- High resistance to bismuthation
- High resistance to debismuthation
- High resistance to molybdenation
- High resistance to demolybdenation
- High resistance to selenation
- High resistance to deselenation
- High resistance to telluration
- High resistance to detelluration
- High resistance to bismuthation
- High resistance to debismuthation
- High resistance to molybdenation
- High resistance to demolybdenation
- High resistance to selenation
- High resistance to deselenation
- High resistance to telluration
- High resistance to detelluration
- High















# PRIVATE SECTOR APPOINTMENTS

## ARCHITECTS

Growing practice with exciting projects requires qualified Architects with 4/5 years experience capable of running projects on their own initiative.

Telephone or write to:  
D. J. Curtis & Associates  
45/46 Park Square, Leeds LS1 5NP  
Tel: 0532 443437

## SOUTHGATE PARTNERSHIP

### CHARTERED ARCHITECT

With at least five years postgraduate experience in management and later control a well established practice in Doha, Qatar. A three year contract, mutually renewable, on married or single status, with generous housing, transport, leave etc. is offered.

Applicants should write with detailed CV to:  
Southgate Partnership  
Redley House  
8 St. Cross Road  
Winchester, Hampshire SO23 9HX

## ARCHITECTS • ASSISTANTS • TECHNICIANS

# UNITECH

Permanent • LYNDIA LLOYD • Contract  
80 GOSWELL RD LONDON EC1 V7DB 01-260 1588

## SENIOR

### ARCHITECTURAL ASSISTANT

Commercial and Industrial Buyer  
due to an increasing workload a further Senior Architectural Assistant is required to join our existing team.  
Applicants must be fully experienced in the design and detailing of commercial and industrial buildings and be capable of accepting responsibility at a senior level.  
A salary commensurate with the level of responsibility will be negotiated.

Please apply in strict confidence to:  
Company Architect  
Wards Construction (Medway) Ltd  
9 Ash Tree Lane  
Chatham, Kent

**MICHAEL HASKOLL ASSOCIATES**  
Chartered Architects, Design Consultants  
7 Cromwell Place London SW7 2JN 01 581 8535

## BUILDING SURVEYOR

Surveyor or Architect with experience in preparation of maintenance surveys, obtaining competitive estimates and supervising small building work efficiently, needed urgently to join a small team working on five yearly programme involving 150 properties and other similar work in this office.  
Salary range to be negotiated depending upon experience.

Car owner and clean driving licence an advantage.  
Please write or call —  
Robert Bidgway-French at the above address

## SCOTT BROWN RIGG & TURNER

## Architects

We still have vacancies for two Architects at our country house headquarters just outside Guildford.

If you have had three or four years post Part III experience, and you are now looking for a job which offers opportunities to develop your skills more widely and at the same time provides real long term career prospects with a good salary and other associated benefits, why not contact

Hugh Lane-Davies Dip Arch RIBA  
Scott Brownrigg & Turner, Bradstone Brook  
Shafton, Guildford GU4 8HT

## Montrose Architecture The Professionals choose us for choice

**TECHNICIANS** 0171 250 911  
We are seeking experienced and talented individuals to join our team of technicians. The successful candidate will be responsible for the design and construction of buildings and will be required to have a good knowledge of building regulations and standards. We offer a competitive salary and excellent benefits package. Please send your CV to: Montrose Architecture, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 129, 130, 131, 132, 133, 134, 135, 136, 137, 138, 139, 140, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184, 185, 186, 187, 188, 189, 190, 191, 192, 193, 194, 195, 196, 197, 198, 199, 200, 201, 202, 203, 204, 205, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226, 227, 228, 229, 230, 231, 232, 233, 234, 235, 236, 237, 238, 239, 240, 241, 242, 243, 244, 245, 246, 247, 248, 249, 250, 251, 252, 253, 254, 255, 256, 257, 258, 259, 260, 261, 262, 263, 264, 265, 266, 267, 268, 269, 270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285, 286, 287, 288, 289, 290, 291, 292, 293, 294, 295, 296, 297, 298, 299, 300, 301, 302, 303, 304, 305, 306, 307, 308, 309, 310, 311, 312, 313, 314, 315, 316, 317, 318, 319, 320, 321, 322, 323, 324, 325, 326, 327, 328, 329, 330, 331, 332, 333, 334, 335, 336, 337, 338, 339, 340, 341, 342, 343, 344, 345, 346, 347, 348, 349, 350, 351, 352, 353, 354, 355, 356, 357, 358, 359, 360, 361, 362, 363, 364, 365, 366, 367, 368, 369, 370, 371, 372, 373, 374, 375, 376, 377, 378, 379, 380, 381, 382, 383, 384, 385, 386, 387, 388, 389, 390, 391, 392, 393, 394, 395, 396, 397, 398, 399, 400, 401, 402, 403, 404, 405, 406, 407, 408, 409, 410, 411, 412, 413, 414, 415, 416, 417, 418, 419, 420, 421, 422, 423, 424, 425, 426, 427, 428, 429, 430, 431, 432, 433, 434, 435, 436, 437, 438, 439, 440, 441, 442, 443, 444, 445, 446, 447, 448, 449, 450, 451, 452, 453, 454, 455, 456, 457, 458, 459, 460, 461, 462, 463, 464, 465, 466, 467, 468, 469, 470, 471, 472, 473, 474, 475, 476, 477, 478, 479, 480, 481, 482, 483, 484, 485, 486, 487, 488, 489, 490, 491, 492, 493, 494, 495, 496, 497, 498, 499, 500, 501, 502, 503, 504, 505, 506, 507, 508, 509, 510, 511, 512, 513, 514, 515, 516, 517, 518, 519, 520, 521, 522, 523, 524, 525, 526, 527, 528, 529, 530, 531, 532, 533, 534, 535, 536, 537, 538, 539, 540, 541, 542, 543, 544, 545, 546, 547, 548, 549, 550, 551, 552, 553, 554, 555, 556, 557, 558, 559, 560, 561, 562, 563, 564, 565, 566, 567, 568, 569, 570, 571, 572, 573, 574, 575, 576, 577, 578, 579, 580, 581, 582, 583, 584, 585, 586, 587, 588, 589, 590, 591, 592, 593, 594, 595, 596, 597, 598, 599, 600, 601, 602, 603, 604, 605, 606, 607, 608, 609, 610, 611, 612, 613, 614, 615, 616, 617, 618, 619, 620, 621, 622, 623, 624, 625, 626, 627, 628, 629, 630, 631, 632, 633, 634, 635, 636, 637, 638, 639, 640, 641, 642, 643, 644, 645, 646, 647, 648, 649, 650, 651, 652, 653, 654, 655, 656, 657, 658, 659, 660, 661, 662, 663, 664, 665, 666, 667, 668, 669, 670, 671, 672, 673, 674, 675, 676, 677, 678, 679, 680, 681, 682, 683, 684, 685, 686, 687, 688, 689, 690, 691, 692, 693, 694, 695, 696, 697, 698, 699, 700, 701, 702, 703, 704, 705, 706, 707, 708, 709, 710, 711, 712, 713, 714, 715, 716, 717, 718, 719, 720, 721, 722, 723, 724, 725, 726, 727, 728, 729, 730, 731, 732, 733, 734, 735, 736, 737, 738, 739, 740, 741, 742, 743, 744, 745, 746, 747, 748, 749, 750, 751, 752, 753, 754, 755, 756, 757, 758, 759, 760, 761, 762, 763, 764, 765, 766, 767, 768, 769, 770, 771, 772, 773, 774, 775, 776, 777, 778, 779, 780, 781, 782, 783, 784, 785, 786, 787, 788, 789, 790, 791, 792, 793, 794, 795, 796, 797, 798, 799, 800, 801, 802, 803, 804, 805, 806, 807, 808, 809, 810, 811, 812, 813, 814, 815, 816, 817, 818, 819, 820, 821, 822, 823, 824, 825, 826, 827, 828, 829, 830, 831, 832, 833, 834, 835, 836, 837, 838, 839, 840, 841, 842, 843, 844, 845, 846, 847, 848, 849, 850, 851, 852, 853, 854, 855, 856, 857, 858, 859, 860, 861, 862, 863, 864, 865, 866, 867, 868, 869, 870, 871, 872, 873, 874, 875, 876, 877, 878, 879, 880, 881, 882, 883, 884, 885, 886, 887, 888, 889, 890, 891, 892, 893, 894, 895, 896, 897, 898, 899, 900, 901, 902, 903, 904, 905, 906, 907, 908, 909, 910, 911, 912, 913, 914, 915, 916, 917, 918, 919, 920, 921, 922, 923, 924, 925, 926, 927, 928, 929, 930, 931, 932, 933, 934, 935, 936, 937, 938, 939, 940, 941, 942, 943, 944, 945, 946, 947, 948, 949, 950, 951, 952, 953, 954, 955, 956, 957, 958, 959, 960, 961, 962, 963, 964, 965, 966, 967, 968, 969, 970, 971, 972, 973, 974, 975, 976, 977, 978, 979, 980, 981, 982, 983, 984, 985, 986, 987, 988, 989, 990, 991, 992, 993, 994, 995, 996, 997, 998, 999, 1000.

## FINAL CAREER MOVE? HEREFORD

Experienced Architect required to help develop and run busy, varied practice with one Architect and three Assistants.  
Apply with CV to:  
David Edwards Associates  
5 Bridge Street  
Tel: 0432 529158

**DAVID FORD ASSOCIATES**  
Require  
**ARCHITECT OF TECHNICIAN**  
for site supervision and detail design work on rehabilitation programmes. Must be fluent draughtsman and fully conversant with building in inner London.  
CV to David Ford  
David Ford Associates  
34 Queen Anne Street, London W1M 9LA

**ARCHITECTS & TECHNICIANS**  
required in Bristol with creative design ability and flair for presentation to join well established and successful team. Above average salary offered.  
Please apply in writing with CV to:-  
RICHARD  
**HEMINGWAY & PARTNERS**  
49 Queen Square, Bristol BS1 4LW

**SAUNDERS design.**  
The Saunders Design Company is a multi-disciplinary design practice which specialises in retail and commercial projects in the UK and overseas.  
We are currently looking for  
**ARCHITECTURAL ASSISTANTS/TECHNICIANS**  
with some years experience in this field who are used to running their own projects from inception to final completion and who are fully conversant with current regulations.  
Applicants will be expected to work on a wide variety of projects with the minimum of supervision.  
Competitive salary packages will be offered to the right candidates.  
Applications including C.V.'s should be made in writing to:  
Alex Martin  
Saunders Design Company  
30-35 Orry Lane, London WC2B 6RH

**Ormod + Partners**  
require  
Architects  
and  
Interior Designers

49 Rodney Street, Liverpool L1 9ER  
051-709 9261

## ARCHITECTURAL TECHNICIAN

Hunting Gate Homes require an experienced architectural technician at their Hitchin Office, to prepare details of homes and layouts and submit technical applications.

A sound knowledge of house building construction, familiarity with the regulations and the confidence to take responsibility is essential.

Salary is negotiable, with company car, non-contributory pension and other benefits.

Write or telephone for application form to:

R. Mitchell  
Technical Services Manager,  
Hunting Gate Homes Limited,  
3/4 Park Street,  
HITCHIN, Herts SG4 9BT.  
Tel: (0462) 31244

Hunting Gate  
4444

To place your advertisement Telephone 01-888 7777 ext 453 or 0204 1884 (no 0900) or write to: Paul Norris Building Design Limited, 30 Calderwood Street, London SE18 6QR.  
CLASSIFIED ADVERTISEMENT RATES  
£10.50 per single column centimetre.  
Box number £5.50 column per page.  
Acceptances  
Published on Friday, 11th May 1988.  
For post-Wednesday prior to publication date or by telephone up until 12.00 pm.  
Cancellation  
Seven days prior to publication.

**TECHNICAL ASSISTANTS** 0171 250 911  
We are seeking experienced and talented individuals to join our team of technicians. The successful candidate will be responsible for the design and construction of buildings and will be required to have a good knowledge of building regulations and standards. We offer a competitive salary and excellent benefits package. Please send your CV to: Montrose Architecture, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 129, 130, 131, 132, 133, 134, 135, 136, 137, 138, 139, 140, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184, 185, 186, 187, 188, 189, 190, 191, 192, 193, 194, 195, 196, 197, 198, 199, 200, 201, 202, 203, 204, 205, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226, 227, 228, 229, 230, 231, 232, 233, 234, 235, 236, 237, 238, 239, 240, 241, 242, 243, 244, 245, 246, 247, 248, 249, 250, 251, 252, 253, 254, 255, 256, 257, 258, 259, 260, 261, 262, 263, 264, 265, 266, 267, 268, 269, 270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285, 286, 287, 288, 289, 290, 291, 292, 293, 294, 295, 296, 297, 298, 299, 300, 301, 302, 303, 304, 305, 306, 307, 308, 309, 310, 311, 312, 313, 314, 315, 316, 317, 318, 319, 320, 321, 322, 323, 324, 325, 326, 327, 328, 329, 330, 331, 332, 333, 334, 335, 336, 337, 338, 339, 340, 341, 342, 343, 344, 345, 346, 347, 348, 349, 350, 351, 352, 353, 354, 355, 356, 357, 358, 359, 360, 361, 362, 363, 364, 365, 366, 367, 368, 369, 370, 371, 372, 373, 374, 375, 376, 377, 378, 379, 380, 381, 382, 383, 384, 385, 386, 387, 388, 389, 390, 391, 392, 393, 394, 395, 396, 397, 398, 399, 400, 401, 402, 403, 404, 405, 406, 407, 408, 409, 410, 411, 412, 413, 414, 415, 416, 417, 418, 419, 420, 421, 422, 423, 424, 425, 426, 427, 428, 429, 430, 431, 432, 433, 434, 435, 436, 437, 438, 439, 440, 441, 442, 443, 444, 445, 446, 447, 448, 449, 450, 451, 452, 453, 454, 455, 456, 457, 458, 459, 460, 461, 462, 463, 464, 465, 466, 467, 468, 469, 470, 471, 472, 473, 474, 475, 476, 477, 478, 479, 480, 481, 482, 483, 484, 485, 486, 487, 488, 489, 490, 491, 492, 493, 494, 495, 496, 497, 498, 499, 500, 501, 502, 503, 504, 505, 506, 507, 508, 509, 510, 511, 512, 513, 514, 515, 516, 517, 518, 519, 520, 521, 522, 523, 524, 525, 526, 527, 528, 529, 530, 531, 532, 533, 534, 535, 536, 537, 538, 539, 540, 541, 542, 543, 544, 545, 546, 547, 548, 549, 550, 551, 552, 553, 554, 555, 556, 557, 558, 559, 560, 561, 562, 563, 564, 565, 566, 567, 568, 569, 570, 571, 572, 573, 574, 575, 576, 577, 578, 579, 580, 581, 582, 583, 584, 585, 586, 587, 588, 589, 590, 591, 592, 593, 594, 595, 596, 597, 598, 599, 600, 601, 602, 603, 604, 605, 606, 607, 608, 609, 610, 611, 612, 613, 614, 615, 616, 617, 618, 619, 620, 621, 622, 623, 624, 625, 626, 627, 628, 629, 630, 631, 632, 633, 634, 635, 636, 637, 638, 639, 640, 641, 642, 643, 644, 645, 646, 647, 648, 649, 650, 651, 652, 653, 654, 655, 656, 657, 658, 659, 660, 661, 662, 663, 664, 665, 666, 667, 668, 669, 670, 671, 672, 673, 674, 675, 676, 677, 678, 679, 680, 681, 682, 683, 684, 685, 686, 687, 688, 689, 690, 691, 692, 693, 694, 695, 696, 697, 698, 699, 700, 701, 702, 703, 704, 705, 706, 707, 708, 709, 710, 711, 712, 713, 714, 715, 716, 717, 718, 719, 720, 721, 722, 723, 724, 725, 726, 727, 728, 729, 730, 731, 732, 733, 734, 735, 736, 737, 738, 739, 740, 741, 742, 743, 744, 745, 746, 747, 748, 749, 750, 751, 752, 753, 754, 755, 756, 757, 758, 759, 760, 761, 762, 763, 764, 765, 766, 767, 768, 769, 770, 771, 772, 773, 774, 775, 776, 777, 778, 779, 780, 781, 782, 783, 784, 785, 786, 787, 788, 789, 790, 791, 792, 793, 794, 795, 796, 797, 798, 799, 800, 801, 802, 803, 804, 805, 806, 807, 808, 809, 810, 811, 812, 813, 814, 815, 816, 817, 818, 819, 820, 821, 822, 823, 824, 825, 826, 827, 828, 829, 830, 831, 832, 833, 834, 835, 836, 837, 838, 839, 840, 841, 842, 843, 844, 845, 846, 847, 848, 849, 850, 851, 852, 853, 854, 855, 856, 857, 858, 859, 860, 861, 862, 863, 864, 865, 866, 867, 868, 869, 870, 871, 872, 873, 874, 875, 876, 877, 878, 879, 880, 881, 882, 883, 884, 885, 886, 887, 888, 889, 890, 891, 892, 893, 894, 895, 896, 897, 898, 899, 900, 901, 902, 903, 904, 905, 906, 907, 908, 909, 910, 911, 912, 913, 914, 915, 916, 917, 918, 919, 920, 921, 922, 923, 924, 925, 926, 927, 928, 929, 930, 931, 932, 933, 934, 935, 936, 937, 938, 939, 940, 941, 942, 943, 944, 945, 946, 947, 948, 949, 950, 951, 952, 953, 954, 955, 956, 957, 958, 959, 960, 961, 962, 963, 964, 965, 966, 967, 968, 969, 970, 971, 972, 973, 974, 975, 976, 977, 978, 979, 980, 981, 982, 983, 984, 985, 986, 987, 988, 989, 990, 991, 992, 993, 994, 995, 996, 997, 998, 999, 1000.

**J.S.P. LONDON**  
require  
**ARCHITECTS**  
with 5 years post graduate experience to help with expanding workload commercial practice.  
Contact: Michael Suiff  
J.S.P. London — Architects  
73 Upper Richmond Road, London SW15 3SZ  
Tel: 01-874 3577

**ARCHITECTURAL ASSISTANTS**  
Part I and Part II Assistants required to join small teams working on a varied range of new buildings and other projects with opportunities for site experience.  
Salary by agreement.  
Please write with brief CV to:  
Geoffrey Flint  
Nellist Mund



## PRIVATE SECTOR APPOINTMENTS

**ARCHITECT**  
Salary up to £13,662  
+ essential car users allowance.

**ARCHITECTURAL  
TECHNICIAN**  
Salary up to £10,568  
+ essential car users allowance

Family Housing Association (Swansea), are looking for a suitably qualified Architect and a Technician to establish an in-house design team which will undertake a range of new build schemes for the elderly and to maintain the associations inner city rehabilitation programme. Previous housing association experience, although desirable, is not essential.

Further information and application forms are available from:-  
**Andre Norris, Director,**  
Family Housing Association (Swansea),  
43 Walter Road, Swansea SA1 5PH.  
Telephone: 0792 461092

**DEREK WALKER ASSOCIATES**  
require first class

**ARCHITECTS &  
TECHNICIANS**

for London and Milton Keynes office to work on major projects in the U.K., U.S.A. and Hong Kong. Applicants should have a minimum of five years' experience, though outstanding design graduates would be considered.

Please telephone:  
(0908) 605883 for details  
or write to:

Elizabeth Hutchinson  
The Old Rectory  
Great Linford  
Milton Keynes MK14 5AX

Renton Howard Wood Levin Partnership

**RHWL**

77 Endell Street  
London WC2H 9AJ

We are looking for an experienced

**SITE  
ARCHITECT**

for a large new-build office project in the West of London.

Please apply with C.V. marking your application  
CL to Janette Payne at the above address.

**TERRY FARRELL PARTNERSHIP**  
are expanding and urgently need experienced

**ARCHITECTS &  
PROJECT ARCHITECTS**

The quantity, scale and quality of our new building works is such that we need Architects and Project Architects with upwards of 4 years appropriate office experience. Our current office restructuring means that the right people could take on key roles contributing to the firm's future direction. The practice's method of working relies on a very capable and dedicated personnel sharing responsibilities in project teams. We are committed to realising the products of innovative design. And enjoying the process!

Please apply in writing with C.V. and work samples to:  
**Jane Kille, Terry Farrell Partnership,**  
8 Paddington Street, London W1M 4DN

**Richard Hemmingway & Partners**  
require an  
**Architectural Technician**  
with several years experience to assist with varied and growing workload in London office.  
Please apply in writing with C.V. to:-  
**RICHARD  
HEMINGWAY  
& PARTNERS**  
48 Grafton Way, London W1P 3LD

**NORMAN & DAWBARN**  
GUILDFORD

require  
**ARCHITECT OR ASSISTANT**

experienced in CAD (GDS preferred) to  
join design team.

Phone or write to:  
Heather Wahl, Norman & Dawbarn  
College House, Woodbridge Road  
Guildford, Surrey  
GU1 4RT  
Guildford GU1 4RT

ND

**ARCHITECTS ASSISTANTS TECHNICIANS  
INTERIOR DESIGNERS SURVEYORS**

Discuss your future prospects with ROBIN GIDDINGS. Send C.V.

**MALLA ARCHITECTURAL APPOINTMENTS**  
334 EUSTON ROAD NW1. Tel: 01-387 1043.

**ACP** require skilled and enthusiastic  
**ARCHITECTS and  
TECHNICIANS**

to work in our main office in Hertfordshire and our branch office in Devon (Exeter).

Ideally you will have design ability and a good knowledge of construction to work on a variety of new and rehab projects.

If you think you meet our requirements or have other queries, send detailed CV immediately to:

**Architects Co-Partnership Limited**  
Northway House  
Potters Bar  
Herts EN4 4PS  
Telephone (0707) 51141

ND

**ASEP**  
**Andrews-Smith Ellis Partnership**  
93 Great Titchfield Street London W1P 7FP

**ARCHITECTS**

with 3-5 years experience are required to  
join an expanding practice working on  
commercial and institutional projects.

Please apply with CV to the above address  
or phone Jim Clark 01-580 9979.

**BUILDING SURVEYOR**

Building Surveyor, qualified RICS, urgently required for multi-disciplinary practice of Architects, Engineers, Quantity Surveyors and Management Consultants who now wish to develop a Building Surveying service. Excellent opportunity for the right person who is naturally meticulous and, at the same time, has the desire and flair to promote and develop the Building Surveying service whilst having the opportunity to work closely with other professionals.

Please apply in writing with C.V. enclosing  
the envelope 'B.S. Application' to:

**Design Group for Industry**  
Tallman House, Tallman Square  
Kenilworth, Warwickshire CV8 1JB

**Jane Lind Associates**  
require  
**ASSISTANT  
ARCHITECT**  
with a minimum of 3 years  
post graduate experience.

Apply to:  
**The Station House**  
Wadhurst  
East Sussex TN3 6RZ  
Tel: 089288 2104

**CONTRACT WORK**  
We urgently require for a  
temporary assignment in the  
Home Counties, Architect,  
Technician, Space Office  
and Interior Designer.  
If you are available for  
notice  
phone Tim Lottus,  
Steve McAllister 01-884 4994  
35-37 Grosvenor Gardens  
Victoria SW1

**ARP ANTHONY RICHARDSON  
& PARTNERS**  
are seeking a lively

**ARCHITECT**

with one or more years post part III  
experience to work on major new build &  
rehabilitation housing projects in Inner  
London.

Please write with C.V. to:  
**Rita Jarvis**  
**ARP Anthony Richardson & Partners**  
31 Oval Rd, London NW1 7EA  
An equal opportunities employer.

**stirling**

We urgently require recently qualified  
**Architects & Experienced  
Technicians**

for temporary and permanent positions in Surrey, Kent, Herts and  
all areas of London, offering excellent rates/salaries.  
Successful applicants will ultimately be semi-resident on site to  
live with the contractor during construction.  
Please write enclosing C.V. to:-  
**NORTHERN BUILDING DESIGN ASSOCIATES**  
31 Bramhall Lane South  
Bramhall  
Stockport  
Cheshire SK7 2DN

**SOLO COOPERATIVE HOUSING SERVICES LTD**  
**BUILDING SURVEYOR**

We are a client-controlled agency providing services to housing co-  
operatives and short-life housing groups in North London. We  
employ 80 people at our Kentish Town office with equal pay and  
responsibility. We are looking for an experienced Surveyor to  
prepare specifications (sometimes with drawings) and supervise  
major repairs and improvements to short-life properties and to  
provide a maintenance survey and supervision service for both  
permanent and short life groups.

Salary £12,830 p.a. (under review), 25 days annual leave.  
We are an equal opportunity employer. For job description and  
application form, to be returned by 26th May 1988.

Contact Rosy Lee or Beatrice King  
SCHS  
833a Kentish Town Road  
London NW5 2JT  
Tel: 01-267 9035/6

**BUSINESS OPPORTUNITIES**

**GOWER PENINSULA**  
**COMMERCIAL  
DEVELOPMENT**  
**ROTHERSLADE BAY**

Offers invited for  
Redevelopment of RotherSlade bay  
shelter giving developers an  
opportunity to create a high quality  
and imaginative commercial scheme  
in one of the most picturesque bays  
in Gower Peninsula.

Further details from:

**City of Swansea**  
The City Estate Agent (E.H. Morris FRICS)  
The Cathedral, Swansea SA1 4PN Tel: 09821 14200

## PRIVATE SECTOR APPOINTMENTS

**CHAPMAN TAYLOR  
PARTNERS**

Chartered Architects and Planning Consultants

have a unique opportunity for a talented

**ARCHITECT**

with design and administrative experience.  
The position involves heading up the design team to work on a  
new regional shopping centre in the London area.  
Applicants should have at least ten years experience. Knowledge  
of retail design would be advantageous.  
Excellent salary package and career opportunity.  
Apply in writing with CV to Nigel Woolner...

96 Kensington High Street, London W8 7RE

Telephone 01 938 3333

**MANCHESTER**

**ARCHITECTS/TECHNICIANS** required to join teams working on  
extensive programme of refurbishment and new build leisure  
projects in several seaside resorts.  
All-round ability essential as schemes demand design,  
presentation, detailing, management expertise.  
Successful applicants will ultimately be semi-resident on site to  
live with the contractor during construction.

Please write enclosing C.V. to:-  
**NORTHERN BUILDING DESIGN ASSOCIATES**  
31 Bramhall Lane South  
Bramhall  
Stockport  
Cheshire SK7 2DN

**NORMAN & DAWBARN**  
GUILDFORD

require

**ARCHITECTS & ASSISTANTS**

3/5 years experience with high standards  
of design & presentation.

Phone or write to:  
Heather Wahl, Norman & Dawbarn  
College House, Woodbridge Road  
Guildford, Surrey  
GU1 4RT  
Guildford GU1 4RT

ND

**Tuffin,  
Ferraby &  
Taylor**

Chartered Building Surveyors  
Architects

TFT is an established dual discipline practice  
with a wide and interesting variety of  
newbuild and refurbishment projects who  
are looking for:  
Architectural Technicians  
Building Surveyors  
Draughtspersons  
Surveying Technicians  
The successful applicants will enjoy excellent  
conditions and atmosphere as part of a  
rapidly expanding practice.

Ring John Ferraby on 01-549 8763

Strand House, 169 Richmond Road,  
Kingston-upon-Thames, Surrey KT2 5DA

**Richard Tear Architects**  
require

**ARCHITECTS  
INTERIOR DESIGNERS  
TECHNICIANS and an outstanding  
INTERMEDIATE STUDENT**

to join their Southampton office

All applicants will be expected to exhibit a high level of  
design ability and contractual responsibility, for which  
commensurate remuneration is negotiable. Our  
workload is varied and interesting and office conditions  
reflect our commitment to proper standards of  
employment.

Please write to Mrs Iris Hooker, Queyde House,  
Central Road, Eastern Docks, Southampton, Hants  
SO1 1AH

**HUTCHISON LOCKE AND MONK**  
have vacancies for

**QUALIFIED  
ARCHITECTS**

with design talent to participate in civic and commercial  
projects at initial feasibility and presentation stages. It is an  
opportunity to join a new design group, take on  
responsibility and to play a leading role in the formative  
stages of significant schemes:

Applicants to contact

**Tony Monk**  
Rayleigh House  
2 Richmond Hill, Richmond, Surrey TW9 6QX  
Tel: 01-948 3136

**CRAMPIN & PRING**

require an experienced

**ARCHITECT**

to lead technical teams through the working drawing and construction  
stages of complex large projects. Relevant experience essential. Excellent  
prospects for career development.

Please apply in writing to:  
23 Warner Gate, Nottingham NG1 1NU

**ARCHITECTURAL  
TECHNICIANS**

More floor space for your skills

The Berni & Host Group has a turnover of £440 million, a multi-million pound  
investment programme, and a commitment to expanding the markets in food/  
drink leisure retailing throughout the UK.

Already, the Group is a major force in branded restaurants, pubs, hotels and  
other ventures. Which, in simple terms, means we have much more square  
footage available for young, ambitious Architectural Technicians to develop their  
abilities, using CAD systems, as part of a small property design team based in  
Hendon, North London.

You should have 18 months design office experience, ideally in retail and  
probably using CAD systems. You'll like using your own initiative and be ready to  
work largely unsupervised.

As a progressive, rapidly developing group, we can offer the right people real  
prospects of career growth, in a professional team atmosphere, with every  
encouragement to gain further qualifications.

The competitive salaries will be backed by an excellent large company  
benefits package, which includes free life insurance, BUPA and pension scheme.  
Send a brief CV to: Helen Wilkinson, Management Development and Training  
Manager, The Berni & Host Group, 106 Oxford Road, Uxbridge, Middlesex.

**BERNI** **CHEFF & BREWER** **OPEN HOUSE**

**THE BERNI & HOST GROUP LIMITED**

**BREWER SMITH & BREWER**  
are looking for

**ARCHITECTS & TECHNICIANS**

with at least five years post part III/HNC experience to work in their  
**KINGSTON, PORTSMOUTH and BOURNEMOUTH** offices.

If you have flair and imagination, enjoy challenging work, and seek career  
development opportunities, please apply in writing with your C.V. to:

**Hoppingwood Farm**  
Robin Hood Way  
London  
SW20 0AB

**3 Bellevue Terrace**  
Portsmouth  
Hants  
PO5 3AT

**7a Burlington Arcade**  
Old Christchurch Road  
Bournemouth  
Dorset BH1 2HZ

to place your advertisement Telephone  
01 555 7177 ext 453 or 0904 term line  
0904 5111 or write to: Paul Huddell Building  
Design Consultants, 30 Caledwood Street,  
London SE18 6QH

CLASSIFIED ADVERTISING RATES  
£18.50 per line column centimetre  
Box number £5.50 columns per page

Acceptance:  
Published on Friday Latest copy date  
first post Wednesday prior to publication  
date or by telephone on 01 555 7177

Cancellation:  
Seven days prior to publication

**Montrose Architecture**  
ARCHITECTURAL TECHNICIAN  
LONDON W8  
To a progressive multi-disciplinary practice  
established in the City of London. The  
practice is seeking a Technician to assist  
with the design team. The successful  
candidate will be expected to exhibit a high  
level of design ability and contractual  
responsibility. The remuneration is  
negotiable. Please apply in writing with  
C.V. to: 01 883 8414  
85-90 Gower Road, Hants W8 7RE

**Recruitment Consultants**

**CHELMSFORD — ESSEX**  
**ARCHITECT &  
TECHNICIAN**  
required to assist in small architectural  
practice. Varied projects,  
salaries negotiable.

Please apply to:  
**Taylor & Hunt**  
Townfield House, Townfield Street  
Chelmsford, Essex CM1 1QL  
Tel: 0945 565751

**ROEVIN**

The agency require  
Architects & Technicians  
for long term contracts  
in the North of England.  
Phone Eddie Austin  
081-969-3678  
(Evening) 081-998-4187

**BIRMINGHAM**  
**ARCHITECTS &  
TECHNICIANS**

required by  
**APEC**  
Current workload includes a variety of  
prestigious projects: Churches, Community  
Buildings & Housing.  
Company are available.  
Please apply in writing enclosing C.V. to:  
**APEC Architects**  
2A Salisbury Road, Boreley  
Birmingham B13 8JG

Busy Essex practice

requires  
**ARCHITECTS**  
with minimum 3 years post part III  
experience

Reply to:  
**Robert Hulston Architects**  
Moulsham Mill  
Parsonage  
Chelmsford CM1 7PX  
Tel: Chelmsford (0945) 959444

IF YOU HAVE A RECRUITMENT  
PROBLEM, RING BUILDING DESIGN

LET THEM HELP YOU TO ADVERTISE  
YOUR VACANCIES - WHETHER ITS FOR  
ARCHITECTS, ARCHITECTURAL ASSISTANTS,  
TECHNICIANS, SURVEYORS, ENGINEERS,  
CLERKS OF WORKS, OR ANY OTHER  
BUILDING SPECIALIST

WEAVE THE WRIGHT OF  
RECRUITING STUFF OFF YOUR  
SHOULDERS. RING BUILDING  
DESIGN ON 01 855 7777  
EXT 453 or 0904 AND  
ASK FOR PAUL HODDS  
OR DAVID PENNY

**ARCHITECT**  
with 2-3 years experience needed by  
small Architect/Development team  
working on varied and interesting  
retail projects.  
Please write with CV to:  
**Philip Lancelotti MRA**  
15 Fitzcroy Street  
London WC2H 8DJ

**Montrose Architecture**  
ARCHITECTURAL TECHNICIAN  
LONDON W8  
To a progressive multi-disciplinary practice  
established in the City of London. The  
practice is seeking a Technician to assist  
with the design team. The successful  
candidate will be expected to exhibit a high  
level of design ability and contractual  
responsibility. The remuneration is  
negotiable. Please apply in writing with  
C.V. to: 01 883 8414  
85-90 Gower Road, Hants W8 7RE

**Recruitment Consultants**

**Montrose Architecture**  
ARCHITECTURAL TECHNICIAN  
LONDON W8  
To a progressive multi-disciplinary practice  
established in the City of London. The  
practice is seeking a Technician to assist  
with the design team. The successful  
candidate will be expected to exhibit a high  
level of design ability and contractual  
responsibility. The remuneration is  
negotiable. Please apply in writing with  
C.V. to: 01 883 8414  
85-90 Gower Road, Hants W8 7RE

**Recruitment Consultants**



## PUBLIC SECTOR APPOINTMENTS

SHAW  
ARCHITECTURAL  
ASSISTANT

We have a vacancy for an Architectural Assistant-Technician to join our established team dealing with housing in South Wales. The position requires initiative and the ability to work with the minimum of supervision. Applicants should possess a minimum of HNC or equivalent and have work experience in the field of housing.

The successful applicant will be required to provide his/her own car for which a mileage allowance is payable.

Salary in accordance with experience, but in the range of £8,000-£10,500. Application forms, to be completed and returned by 24th May 1986, are obtainable from:

Allison Pullen  
Secondary Housing Association for Wales Ltd  
387 Newport Rd, Cardiff CF2 1RP  
Tel: 0222 498641

## PLANNING TECHNICIAN

Planning Department  
Salary £5,088-£8,028

The Borough of Broxbourne is situated on the Northern edge of London and is subject to intense development pressure. It contains a mixture of urban development and green belt countryside. There is a heavy and increasing workload falling on the planning office which must respond to the Council's desire to protect and enhance the environment of the area through positive and effective planning.

This post will be located in a small but busy technical section dealing with planning statistics and legislation, local land searches, artwork displays, plan preparation, photography, data mapping and associated activities. The postholder will liaise closely with the development control and local plan section. It is anticipated this post will also play a key role in the reorganisation and computerisation of all planning records and the digitisation of plans and maps, which is currently under way.

Applications for this post, which will provide a heavy but stimulating workload and a pleasant area in which to live, are invited from experienced technicians holding a relevant qualification.

Relocation and housing assistance is available in appropriate cases together with a casual user car allowance.



Write to the Personnel and Management Services Officer, Manor House, Turners Hill, Cheshunt, Herts. EN8 5LE for an application form and further particulars to be returned by 22nd May, 1986.

BOROUGH OF BROXBORNE

PRIVATE  
SECTOR

BENSON & BENSON  
Chartered Architects  
urgently require keen, young,

Architectural Assistant with some relevant experience to work on a variety of projects involving the repair, alteration and conservation of historic buildings.

Send CV and write with details of availability to:  
Jeremy Benson, Walpole House, Chiswick Mall, London W4 9PE.

For an application form and job description, returnable by 23rd May 1986, please contact the Personnel Services Officer, Council Offices, 8 White End, Wokingham, Berkshire RG11 1BN. Telephone: Wokingham (0734) 788633, extn. 206, quoting reference HE104.

ARCHITECTURAL ASSISTANT - TECHNICIAN

We are a small practice in an attractive part of Wales, with an increased and varied workload. We are looking for an

ARCHITECTURAL TECHNICIAN or PART II STUDENT

able to work under the direction of a partner but with minimum supervision. Salary negotiable.

Please reply in writing to: C. J. Davies, The Old Castle, Pembroke, Pembrokeshire SA71 4LA.

Details of salary requirements.

OFFICE TO LET

ACCOMMODATION available near Victoria Station, 400-1100 sq. ft. will suit architectural, engineering or quantity surveying practice. Possibility to share facilities. Full details please phone 020 7538 or 020 7534.

## Newark &amp; Sherwood District Council

DEPARTMENT OF  
PLANNING AND ARCHITECTURE  
PROJECT ARCHITECT  
Scale 5/SO2 £7920-£11604

The Architects Division has 18 technical staff including architects, quantity surveyors, clerks of works and a specialist historic buildings conservation section and is responsible for implementing the bulk of the District Council's programme.

The workload is varied and includes housing new-build and modernisation, sports centre refurbishment, industrial workshop development, energy conservation schemes and a variety of historic buildings projects such as the repair of Newark Castle and Newark Town Hall.

The successful candidate will have a minimum of 3 years post registration experience and will be expected to show initiative and enjoy responsibility.

Application forms and further details can be obtained from the Personnel Officer, Ketham Hall, Ketham, Newark, Notts. NG23 5QX telephone Newark (0636) 705111 Extn 287 to whom they should be returned by Wednesday 28th May, 1986.

THE DISTRICT COUNCIL OF  
CHESTER-LE-STREETAPPOINTMENT OF  
ASSISTANT  
QUANTITY SURVEYOR  
— DIRECT LABOUR ORGANISATION  
Scale 5/6 £7920-£9591

Applications are invited from Quantity Surveyors with general contracting experience. The successful applicant will be responsible for preparing estimates and tenders, submitting interim claims and final accounts and generally carrying out all quantity surveying duties for the Direct Labour Organisation, carrying out a wide range of related housing building, modernisation and maintenance activities. A casual car user allowance will be paid.

Applications should be made on the prescribed forms which are available on request and should be completed and returned to me by Wednesday 28th May, 1986.

Conveying of Member, directly or indirectly, will disqualify. A GOUGHTLY CHIEF EXECUTIVE OFFICER

Civic Centre  
Newcastle Road  
Chester-le-Street  
Co. Durham

## Architect

£12,234-£13,446

An Architect is required to assist the Principal Architect in design and implementation of a major refurbishment scheme for the Mansion House, the 18th century residence of the Lord Mayor of London, a Grade I listed building. This scheme is currently at the evaluation stage.

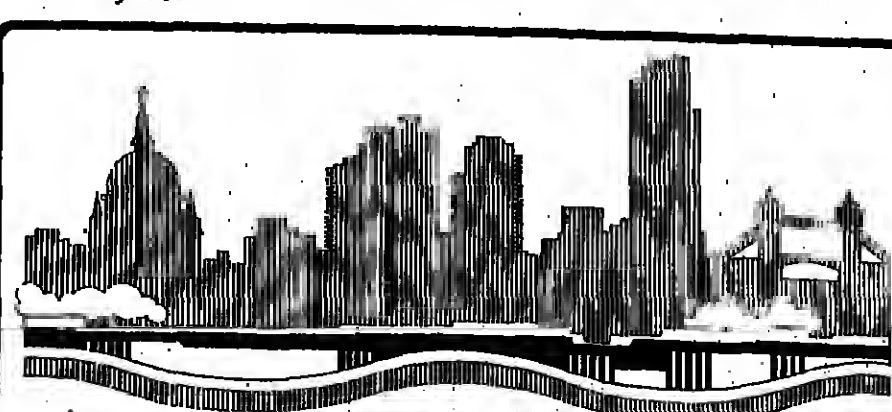
## Architectural Assistant

£8,352-£9,750

An Architectural Assistant is required to work on a variety of interesting buildings within the City and at the Corporation's other widespread sites elsewhere in and around Greater London.

Both posts are located in Guildhall in pleasant surroundings, and although initially short term, it is hoped that the initial contracts will be extended. The work of the Architectural Division covers a far wider range of building types than undertaken by a normal local authority.

Non-smokers preferred, though this is not essential. For further details please ring 01-606 3030 ext. 2707, 2725 or 2804; or write to the City Architect & Planning Officer, P.O. Box 270, Guildhall, London EC2P 2EJ. Closing date: 27th May 1986.



Department of Architecture & Planning

To place your advertisement telephone 01-855 7777 ext 453 or 2004 Telex: 190 890031 or write to Paul Hudson Building Design Dept, 30 Grosvenor Street, London W1B 6QA.

CLASSIFIED ADVERTISING RATES  
£18.50 per single column centimetre.  
£18.50 per line per column per page.  
Seven days prior to publication.

METROPOLITAN BOROUGH OF WOLVERHAMPTON

DEPARTMENT OF TECHNICAL SERVICES  
INTERIOR DESIGNER  
Salary Scale £6-SO1 £6,878-£10,638

Applications for the above post, in the Architect's Division, are invited from qualified designers with a first or producing high quality presentation materials.

The post holder will provide a design, specification and advisory services on interior, furniture and graphic design matters in support of project teams concerned with the design, specification and construction of the Council's Capital and Revenue Programmes.

It is envisaged that the successful candidate will have completed a recognised full time Design Course, will be M.S.A.O. or equivalent and will have some experience in a design office or similar working environment.

A casual users car allowance is attached to this post.

Application form and job descriptions can be obtained from the Clerk of Technical Services, Civic Centre, St. Peter's Square, Wolverhampton, WV1 1RW. Closing date 28 May 1986.

Wolverhampton Council welcomes applications from all sections of the Community irrespective of an individual's sex, ethnic origin or colour and from people with disabilities who have the necessary attributes to do the job.



Wokingham District Council has one of the fastest growing populations in the County, largely due to its location. This has led to an increased requirement for Council provided facilities.

The Architectural Section is facing a marked increase in workload and is urgently seeking to fill the following position. The bulk of the work is in building and alterations to the Council's housing stock but there is also a wide variety of other projects at various stages in hand at the time.

The Council are looking for a candidate with flair and imagination, a strong sense of design and a generally, a sound knowledge of building construction. Staff at all levels are encouraged to shoulder as much responsibility as their experience permits.

Applications should be made on the prescribed forms which are available on request and should be completed and returned to me by Wednesday 28th May, 1986.

Conveying of Member, directly or indirectly, will disqualify. A GOUGHTLY CHIEF EXECUTIVE OFFICER

Civic Centre  
Newcastle Road  
Chester-le-Street  
Co. Durham

Senior Architect

Salary: £9,975-£10,638 p.a. Grade: SO1

This applicant for this post should be studying for, or have obtained, RIBA Part III. They will be expected to handle projects in varying ways from inception to completion either on their own or as a leader of a small team.

The Council has a generous relocation scheme offering assistance towards legal and estate agents fees, removal expenses etc, and temporary housing may be offered if appropriate.

For further information and to obtain the application form, please contact the Personnel Services Officer, Council Offices, 8 White End, Wokingham, Berkshire RG11 1BN. Telephone: Wokingham (0734) 788633, extn. 206, quoting reference HE104.

WOKINGHAM DISTRICT COUNCIL

Inner London Education Authority

DEPARTMENT OF BUILDING AND PROPERTY SERVICES

BUILDING MAINTENANCE

In May 1986 the ILEA became the first directly elected Education Authority. The new Authority is establishing a new Building and Property Services Department and applications are invited for the following posts:

Deputy Regional Managers  
Salary Scale £14,081-£25,881 plus £1,494 LWA.

To maintain ILEA buildings and carry out general building surveys. Must be RICS, RIBA or similarly qualified and experienced in managing staff. Ref: AR2

Regional Office Staff  
Salary Scale £12,231-£21,031 plus £1,494 LWA.

To lead a team engaged in a programme of planned maintenance. Must be RICS, RIBA or similarly qualified with staff management and relevant professional experience. Ref: AR3

Senior Surveyors  
Salary Scale £10,418-£12,231 plus £1,494 LWA.

To be responsible for day-to-day maintenance 'on the ground'. Must have MSBT, TEC, HNC or equivalent maintenance experience. Ref: AR4

Building Surveying Assistants  
Salary Scale £8,238-£10,418 plus £1,494 LWA.

To work in a team diagnosing and remedying building defects. Must be qualified (ONC/TEC or HNC/HTC or RICS or RIBA) with wide relevant experience. Ref: AR5

Asbestos Surveying Assistants  
Salary Scale £8,238-£10,418 plus £1,494 LWA.

To identify asbestos in ILEA schools and prepare remedial schemes in accordance with planned programme. Must have appropriate qualification (e.g. TEC or HNC) and have wide relevant experience. Ref: AR6

Application forms and further details are available from the Personnel Branch, (EO/DePS/P), Room South 722, The County Hall, London SE1 7PS, telephone (01 633 1294). Please quote appropriate reference number.

Closing date for the return of completed application forms is 23 May 1986.

ILEA IS AN EQUAL OPPORTUNITIES EMPLOYER

## PUBLIC SECTOR APPOINTMENTS

WILTSHIRE COUNTY COUNCIL  
ARCHITECTURAL  
TECHNICIAN  
Scale 3/6 (£6,234-£9,591)

Applicants should have a minimum of HND (Building) or equivalent qualification and at least 5 years' relevant experience, including assisting architects on major and minor capital works as well as handling smaller works on their own.

A practical knowledge of computer aided design equipment is desirable but not essential.

Starting salary within the above scale will be established on the basis of relevant experience and qualifications.

Application forms and further particulars are available from the County Architect, Department of Architectural Services, County Hall, Trowbridge, Wiltshire, BA14 6JA. Telephone: Trowbridge 3841 ext. 2101.

Closing date: Monday, 2nd June, 1986. Ref. AR.86/127.

## Housing Department

Development  
Architect

Grade POE  
£13,187-£14,202 p.a. Inclusive  
Based at 83 Victoria Street SW1 (Ref HSG27)

Play your part in Inner-London regeneration! A self-starting, achieving development-architect is needed to work within the Director's Office on new housing initiatives. You will run pilot-contrasts and organise programmes of established low-cost housing initiatives such as start-up flats, barge and partnership package-deals; and you will also bring forward your own new initiatives to meet known housing needs.

Applicants must have 10 years post-qualification experience, of which 3 years must have been spent working on Local Government housing, and another 3 years working on Private Developer's housing. Costing ability is essential.

28 days holiday plus one day off every 4 weeks. Interest free annual season ticket loan available.

For informal discussion and information about the post telephone Shelia Tribe on 01-788 2572. Closing date 23 May, 1986.

## Planning and Transportation Department

Graphics Technicians (Ref PT26)  
£8,237-£10,014 p.a. Inclusive

The Planning and Transportation Department's Urban Design Division needs a team of hard-working Graphics Technicians with imagination and flair to form the new Technical Support Group.

The work of the division covers an exciting range of environmental and transportation projects in one of the country's most important and historical urban areas.

The Technical Support Group will provide a high quality graphics support service to the Division, and to the Department as a whole. The responsibilities of the group will include the preparation of maps, leaflets, brochures and models together with a comprehensive exhibition service.

Applicants should have the relevant creative skills backed up by wide experience. The ability to organise one's own workload under minimum supervision is essential.

For further information please ring the Head of the Technical Support Group, Martin Bannan on 01-788 2858.

24 days annual holiday plus 1 day off every 4 weeks. Modern offices near Victoria Station with restaurant facilities. Interest free loan for annual season ticket. Closing date 20 May, 1986.

For an application form telephone 01-834 5958 (24 hour Answerphone Service), call at the One Stop Services floor at City Hall or write to the Personnel Manager, Personnel Management Division (Ref PT26) or (Ref HSG27) P.O. Box 240, Westminster City Council, City Hall, Victoria Street, London W1T 6GP.

## TENDER

METROPOLITAN BOROUGH OF SEFTON  
BOROUGH ARCHITECTS DEPARTMENT  
APPROVED LIST OF PROFESSIONAL CONSULTANTS

Applications and Practice Information sheets are invited from ARCHITECTS, LANDSCAPE ARCHITECTS, MECHANICAL & ELECTRICAL ENGINEERS, STRUCTURAL ENGINEERS, SURVEYORS (Building & Land)

The Council intends to establish an approved list of the above professions from which appointments would be made for individual projects in the Council's Capital and Revenue building works programmes. Preference will be given to those practices that are based in or close to the Borough.

All applicants will be expected to complete a short questionnaire intended to give background information upon the skills and capacity of the practice. The forms are available from the Acting Borough Architect, 57 May 1986.

For further information contact: Alan Mark Naylor, Acting Borough Architect (Dept C) 57/105 Lord Street, Southport PR8 1RJ Tel: Southport 33133 Ext. 308

SOUTH KESTIVEN DISTRICT COUNCIL  
ARCHITECTURAL ASSISTANT  
Salary: Scale 50 1 (£9975-£10638)

Technical Services Department  
Applications are invited for the above post within the Architects section of the Authority.

The person appointed should be a qualified architect with the experience to act as a Project Architect within a progressive and busy department, with a design programme including housing for sale, sheltered homes, council house modernisation, remodelling of a bus station and newswinning pool projects.

The post is based at Grantham, Lincolnshire, an area offering good quality housing at low cost in attractive rural surroundings and within approximately one hour's train journey from London.

Additionally, a generous relocation package is offered in appropriate cases (furniture removal costs, 75% of legal and associated costs up to £1500 and a weekly lodging allowance of £22.50).

Application forms from Head of Personnel & Management Services, St Vincents, Grantham, Lincs. Telephone Grantham 73781 ext 223. Closing date: 27 May 1986.

## ARCHITECTURAL

Architect  
PO2. £13,167-£14,202 Incl.

In common with most Local Authorities this Council is directing its efforts towards the repair and improvement of its own buildings, as well as a limited new build programme involving Housing, Leisure, Social Services and Civic Buildings.

You should be used to handling a busy workload involving detailed design, working drawings and undertaking site supervision.

If you are an Architect who has experience of these types of projects and is committed to working within a multi-disciplinary office and willing to accept responsibility then please ring Mr M Lee on 01-788 3020 ext. 4704 for further details. Please quote ref: AHAA 7/80. Closing date: 23rd May, 1986.

## Senior Clerk of Works

SO1. £11,292-£11,955 Inclusive

To assist in the supervision of Housing, Social Services and Leisure and Recreation projects.

You should have had experience in an appropriate construction industry trade and have a thorough practical knowledge of building construction, the Standard J.C.T. Form of Contract and Building Legislation.

Casual car allowance.

For further information please contact Michael Lee, 01-788 3020, ext. 4704. Please quote ref: ACW/F4/BD. Closing date 18th June, 1986.

Application forms from London Borough of Hammersmith & Fulham (Personnel), Town Hall Extension, King Street, Hammersmith W6 or telephone 01-741 0804/24 (hour answering service) quoting appropriate ref.

Hammersmith  
& Fulham  
An Equal Opportunity Employer

## BUSINESS OPPORTUNITIES

THE  
MARITIME QUARTER  
SWANSEATO BE LET BY  
PRIVATE TREATY

A 0.5 acre site for a mixed development of retail, pub, restaurant and residential/office units.

Located in a prestigious situation at the centre of the City's thriving and high quality Maritime Quarter.

Further details available from

City of Swansea

The City's Main Agent (B.H. Morris FRICS)  
The Guildhall, Swansea SA1 4PN Tel: 05822111 x2107

Applications from members of the black and ethnic minority communities and from women are particularly welcome as they are under-represented in the service.

Job description and application form from Recruitment and Personnel Officer, 12/27 Station Road, Wood Green, London N22. Tel: 01-889 5815 (94 hour answering service). Closing date: 31st May 1986.

HARINGEY IS AN EQUAL OPPORTUNITY EMPLOYER

THE UNIVERSITY OF MANCHESTER  
DEPARTMENT OF ESTATES AND SERVICES  
SENIOR  
ARCHITECTURAL TECHNICIAN

required with proven ability and a minimum of 8-10 years experience for the Technical Services Section of the above department. This work includes major new development and adaptation of existing buildings under the direction of the principal architect. Salary range: £7800-£10673 p.a.

Please write with full C.V. to the Director of Estates and Services, Beyer Building, University of Manchester, Oxford Road, Manchester M13 9PL. Closing date 16th June 1986.

## TECHNICAL SERVICES DEPARTMENT

PRINCIPAL BUILDING  
MAINTENANCE SURVEYOR

£10,950 to £11,604 per annum

The Council has recently decided that its building maintenance work will be carried out on a planned programme and include energy saving improvements.

A new post has been created for a Principal Building Maintenance Surveyor to head a small group, in the Architects Section, responsible for the maintenance of all public buildings (excluding Council houses). He or she would be required to prepare a planned maintenance programme for repair and energy saving improvements, put these in hand, and maintain the programme thereafter.

The post would suit someone with strong organisational abilities, who wants to make a personal contribution to modern maintenance management, and who can cope with the pressures associated with this kind of work.

Applicants should be suitably qualified (ARICS or equivalent) and should have at least 10 years practical experience. They should also be car owner/drivers with a current licence. A car user allowance is payable. The Council operates a car leasing scheme.

A scheme of flexible working hours in operation.

In approved cases assistance is given with relocation expenses, temporary accommodation etc.

For further information regarding the duties of the post contact Emond Abraham, Chief Architect, Extn. 2054.

Application forms, to be returned by 27th May 1986, and job description obtainable by writing to the Personnel Officer, Civic Centre, Duke Street, Chelmsford or by telephoning Chelmsford 261733 Extn. 3143.

CHELMSFORD BOROUGH COUNCIL

Application forms, to be returned by 27th May 1986, and job description obtainable by writing to the Personnel Officer, Civic Centre, Duke Street, Chelmsford or by telephoning Chelmsford 261733 Extn. 3143.

CHELMSFORD BOROUGH COUNCIL

## LONDON BOROUGH OF HARINGEY

Clerk of Works  
£11643-£12297 SO2

You will be expected to participate in the development of the Service's Cooperative Management System. This will involve taking part in Team Meetings and carrying out any management functions delegated to you. Service level commensurate with the grade of the post.

To supervise and ensure that all materials and workmanship for a building contract comply with the drawings, Specifications, Bills of Materials, Architect's Instructions and Conditions of the contract.

To check that all building works as built comply with Building Regulations, Statutory undertakers requirements and Health and Safety at Work provisions.

To undertake all inspections and tests necessary in accordance with the Clerk of Works Manual.

To coordinate inspections by Mechanical and Electrical Engineers and consultants and to report to the Project Architect and to Client at pre-handover stage of the contract, to arrange handover and respond to relevant Client/User problems between handover and completion of Defects Liability Period.

You must have had long experience as a Clerk of Works, site agent or general foreman/worker.

For an application form, please phone 01-340 8031 ext. 806 or write to the Staffing Section, Building Design Service, Haringey Town Hall, The Broadway, Crouch End, London N8 9RS. Closing date 23rd May 1986.

Principal Technical Officer (Housing)

Job share (17½ hours per week)  
The salary payable is £6789-£7359 PO3

The South Haringey Technical Team is responsible for the conditions of the Council's housing stock in the area, providing a comprehensive service from repairs inspection to project management of major rehabilitation and new build schemes.

You will be involved in the job share with an existing postholder, managing the area technical team.

You will need experience of staff management, a technical qualification and experience at a senior level in project management. Experience of working with tenants' groups and local authority procedures (including cost control and budgeting) would be an advantage.

You will be required to represent the Housing Services Area Sub-Committee meetings and tenants meetings.

As Haringey is a multi-racial borough, experience of working in such areas is essential, as is a commitment to the involvement of tenants in decision making.

Applications from members of the black and ethnic minority communities and from women are particularly welcome as they are under-represented in the service.

Job description and application form from Recruitment and Personnel Officer, 12/27 Station Road, Wood Green, London N22. Tel: 01-889 5815 (94 hour answering service). Closing date: 31st May 1986.

HARINGEY IS AN EQUAL OPPORT